

# Survey of Registered Nurses in California

## 1997



Conducted for the  
California Board of Registered Nursing

by the  
Institute for Social Research  
California State University, Sacramento

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# Survey of Registered Nurses in California

## 1997

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## EXECUTIVE SUMMARY

### INTRODUCTION

This study is the third in a series of surveys designed to describe licensed registered nurses in California. The studies, which were commissioned by the California Board of Registered Nursing (BRN), were first conducted in 1990 and repeated in 1993 and 1997. The current study was conducted by the Institute for Social Research (ISR) at California State University, Sacramento. The first two studies were conducted by the Survey Research Center at California State University, Chico.

The purpose of this study is to describe California's working RNs in terms of demographic composition, educational experience, and work setting; to identify factors which may contribute to satisfaction and dissatisfaction with nursing work; and to examine changes in these patterns over time.

### PROFILE OF REGISTERED NURSES WORKING IN NURSING

- In 1997, the typical working nurse in California was a caucasian woman, 45 years old, with an Associate or Bachelor's degree.
- Most received their first RN license in the U.S.
- Three-fifths of working RNs are direct patient care providers.
- Tenure with the employing organization has increased since 1990.
- The typical nurse works in an acute hospital setting. Almost two-thirds work in one of four clinical areas: medical/surgical, critical care, geriatrics and obstetrics.
- The nursing work force is more stable than in 1990, with fewer taking a break in nursing employment and a strong majority planning on working a similar number of hours for the next five years. Fewer plan to reduce their work hours or leave nursing entirely.

- Most respondents hold a single nursing position, although the proportion holding two or more has increased steadily from 1990 to 1997. Holding multiple positions is typical only of nurses employed by temporary agencies or registries where 60% hold more than one position.
- The standard work week has remained constant since 1993 at 36.3 hours. Fewer nurses work either less than 33 hours or more than 41.
- The sample is evenly split between working 8 hours days and 9 to 12 hour days, yielding an average of 9.1 hours per day. Working an hour or more overtime is a common experience shared by two-thirds of the respondents. Most nurses experienced no change in time base during the 12 months preceding the survey.
- Mean nursing income jumped dramatically between 1990 and 1997, up 43% from \$31,504 to \$45,073, and constituted a larger share of household income.

### RELATIONSHIPS BETWEEN WORK SETTING CHARACTERISTICS

- Most direct patient care providers and clinical nurse specialists work in acute hospital settings. In contrast, nurse practitioners are more frequently employed in ambulatory care settings.
- Respondents working in critical or emergency care or in perioperative/anesthesia work almost exclusively in acute hospitals. Obstetrics is concentrated in acute hospitals, while pediatrics is more dispersed among acute hospitals, ambulatory care and other settings. Three out of five geriatric nurses work in skilled nursing/extended care facilities, while one in five work in home nursing care. Although medical/surgical specialists are concentrated in acute hospitals, they are employed in significant numbers in ambulatory and home nursing care and in other settings.

- Dependence upon temporary agency employees is greatest in home nursing care.
- Advanced practice certifications offered less of an income advantage in 1997 than they had in 1993. While those with certificates in 1993 earned 15% more than those without, this income advantage had decreased to 8% in 1997. This decline occurred because, while average income for other types of nurses increased, average income for advanced practice nurses declined 5% during that time period.
- Nurses employed in acute care hospitals earn more than those employed in other settings. Those employed in skilled nursing and extended care facilities earn the least.
- Experience as an RN differentiated salaries much more in 1997 than it did in 1990. While the most experienced nurses earned 25% more than the least experienced in 1990, they earned 50% more in 1997.

#### **ATTITUDES TOWARD NURSING EMPLOYMENT**

- Nurses employed in skilled nursing facilities were the most dissatisfied. Those employed by temporary agencies were a close second.
- The most satisfied nurses were those in three specialties: obstetrics, geriatrics and perioperative/anesthesia.
- Two groups had differing attitudes about their work in nursing: respondents working in acute hospitals and those working in home nursing care. While nurses in acute hospitals were more satisfied with opportunities to learn new skills, use existing ones and advance in their profession, they were significantly more dissatisfied with job security, support from nursing administration, the adequacy of RN staffing and benefits than nurses employed in other organizations. Similarly, while homecare nurses were quite positive about RN staffing, interactions with patients and the opportunity

to learn new skills and advance in their profession, they were among the most dissatisfied with benefits, job security and their work schedule.

#### **IMPLICATIONS FOR THE FUTURE WORK FORCE**

- According to a 1996 national survey, California has the lowest ratio of employed nurses per 100,000 of any state (566, compared with a national average of 798). The 1996 rate was extremely close to the 1997 figure derived from the California survey and 1997 population figures (554). The Pacific states have the lowest rates of any region (621), while New England (1103), the West North Central (936) and the Middle Atlantic (931) have the highest rates.
- Within California in 1997, Los Angeles and the south central valley have the lowest rates of employed RNs (464 and 407). The highest rates are found in Napa/Sonoma (756), San Francisco and the East Bay (686) and San Jose (647).
- Employment opportunities for California's registered nurses improved markedly in the 1990s. Since 1990, the proportion of non-retired respondents currently working in nursing has increased (from 83% to 89.6%), while the proportion working outside nursing has declined 25% (from 5.6% to 4.2%) and the proportion unemployed has been cut almost in half (from 11.4% to 6.2%). The change affected all age groups, but especially those 45 and over.
- The proportion of RNs currently not working in nursing who planned to return tripled between 1990 and 1997 -- from 9.2% to 26.9% -- while the proportion saying they definitely would not return declined (from 37% to 31%).
- The proportion of currently employed RNs intending to leave nursing within the next five years has decreased by a third since 1990.

- In 1990, almost one in seven nurses expected to leave nursing within the next five years; in 1997, that had decreased to one in ten.
- Age was the most important factor affecting the intention to leave nursing. Virtually nothing in the nursing experience affected this decision. Nurses working in an ambulatory care setting constituted the only exception. They were *less* likely than those in other organizational settings to plan on leaving nursing.
- Two separate approaches to estimating the number of active RN licenses in California in 2007 produced projections varying by 2.3%. The simplest, utilizing the average number of new licenses and withdrawals from active license status over the past 5 years, projected 261,236 active licenses in 2007. The second approach, using information from survey respondents on their employment status, intentions to return to nursing or to leave nursing within the next five years, and age at the time of the survey, projected 267,397 active licenses in 2007.
- Both approaches overstate the number of active licensees in the California labor force because a substantial number of licensees live in other states -- 8.8% in the survey year. Assuming this number is relatively constant from year to year, the effective resident labor force would be approximately 91.2% of the estimates, varying between 238,247 and 243,866 for the two approaches.
- With either approach, the real impact of the maturing RN population will probably not be felt until 2012, when the vanguard of the baby boom generation moves into retirement age. In 1997, almost half of active licensees were under 45; by 2007, little more than a third will be this young and half will be 45 to 59. By 2012, a third of this group (16%) will have matured into the prime retirement category (60 - 64).

## CHAPTER 1. INTRODUCTION

This study is the third in a series of surveys designed to describe licensed registered nurses in California. The studies, which were commissioned by the California Board of Registered Nursing (BRN), were first conducted in 1990 and repeated in 1993 and 1997. The current study was conducted by the Institute for Social Research (ISR) at California State University, Sacramento. The first two studies were conducted by the Survey Research Center at California State University, Chico.

### Objectives

The purpose of this study is to describe California's working RNs in terms of demographic composition, educational experience, and work setting; to identify factors which may contribute to satisfaction and dissatisfaction with nursing work; and to examine changes in these patterns over time.

Each time the survey has been conducted the content has been modified slightly based on findings from the previous survey, and items of interest have been added. Generally, however, consistency of measures has been maintained, which permits longitudinal comparisons. The current study also advances the examination of trends across survey

years by standardizing and integrating the data for all three studies into one database. This allows for multivariate comparisons across survey years, since it is sometimes important to take several characteristics into consideration at the same time when looking for changes over time.

**Report organization.** This report is intended to provide a comprehensive and easy-to-use source of information about the 1997 Survey of California's Registered Nurses. The tables in Appendix A provide descriptive responses for all three survey years with items in the same order that they appear in the 1997 questionnaire. Appendix B includes a copy of the questionnaire and the accompanying correspondence.

The survey collected a great deal of information on a wide range of topics. There are many complex interrelationships between demographic composition, licensure, educational preparation, employment status, work setting and job satisfaction. Our approach has been to focus on issues that will be most important to those using the report.

Each chapter of the report examines a particular set of characteristics, or looks at the interrelationships between different sets of characteristics. Tables and figures are included in each chapter for those findings thought to be of greatest interest to most users.

### Methods

The sampling frame for this survey consists of all RNs with active-status California licenses and addresses as of May 30, 1997. BRN staff created a data tape containing name, address, date of birth, and date of licensure for all 216,571 cases in the sampling frame, from which ISR selected a random sample of 4,000.

Questionnaires were mailed in four waves. One week before the initial survey packet was mailed, a pre-survey letter was sent to introduce the study, explain its purpose, and emphasize the importance of participation. One week after the initial survey

Table 1.1 Outcomes and Response Rates by Survey Year

|                                 |                                    | 1997  | 1993  | 1990* |
|---------------------------------|------------------------------------|-------|-------|-------|
| Questionnaires initially mailed |                                    | 4,000 | 3,685 | 5,400 |
| Ineligible cases                | Undeliverable                      | 54    | 272   | 598   |
|                                 | Retired                            | 173   | 66    | 320   |
|                                 | Deceased, out of state or disabled | 47    | 50    | 157   |
| Eligible cases                  |                                    | 3,726 | 3,297 | 4,680 |
| Survey respondents              |                                    | 2,784 | 2,476 | 3,112 |
| Response rate                   |                                    | 74.7% | 75.1% | 66.5% |

\* The information displayed in this table was taken directly from *Survey of Licensed Registered Nurses, California 1990*. There appears to be a slight discrepancy in the computations for this year. For more information, please refer to the methodology section of the 1990 report.

packet was mailed, reminder postcards were sent. A final follow-up mailing was sent three weeks later.

In order to elicit the highest possible response rate, all correspondence addressed potential respondents by name. Outgoing surveys were coded with a tracking number and completed surveys, along with ineligible and undeliverable cases, were logged into a response status file. The status file permitted close monitoring of the response rate and conservation of resources, since the final follow-up mailing, which went out three weeks after the initial survey mailing, was sent only to eligible non-respondents.

Completed questionnaires were edited for consistency and after data entry, responses were further screened for consistency and completeness.

**Response rates.** Completed questionnaires were received from 75% of the eligible nurses to whom the survey was mailed. This is the same response rate obtained in the 1993 survey and compares favorably with that for 1990 (67%).

Of the 4,000 questionnaires initially mailed, just 54 were ultimately returned as undeliverable. The percent of undeliverable surveys has decreased dramatically with each survey year, from 11% in 1990, to 7% in 1997 and finally to 1% in 1997. Several factors are responsible for the decrease. The 1990 sample was not as “clean” on selection as subsequent years and included some cases with inactive licenses. In 1997, the RN database was checked against a postal address validation program.

There were 47 cases for whom information was received which made the potential respondent ineligible to participate in the survey. This includes those who had moved out of state, were deceased, disabled, or who “self-disqualified” themselves because they are not employed in nursing. Two potential respondents returned their surveys blank with a note saying that they had been retired from nursing for too long to be able to participate in the study. This was in response to a new question in the 1997 instrument that asked respondents to indicate whether or not they were retired from nursing work. The questionnaires for 1990 and 1993 did not

specifically measure retirement status. Although 171 retired RNs returned completed questionnaires, their responses have been excluded from the analysis presented in this report. (Table 1.1)

**Representativeness.** Survey responses were matched back to the original sample of 4,000 so that response bias could be examined. The data from the licensing database contained information, including date of birth, licensure, and zip code, that is useful for examining variations in response rates. There is a definite relationship between response rates and age and date of licensure. Nurses aged 45 years and older were more likely to respond to the survey than younger nurses. About seven out of ten younger nurses responded, compared to eight out of ten older nurses. The response rate, however, never drops below 71% for any age group, which is still relatively high for a survey of this nature. Similarly, response rates were high throughout the state, varying from 73% in San Bernardino and Orange to 87% in Napa, Sonoma, Lake and Mendocino counties. (Appendix Table A-6)

**Precision of estimates.** Random selection of respondents, a sufficient sample size and high response rates all contribute to a sample's representativeness. The precision with which the sample predicts population values is a function of the desired level of confidence and the number of cases generating a given sample value. Assuming a 95% confidence interval -- e.g., where 95 of a 100 random samples would produce values within the specified range -- tabled values in this report provide estimates with varying degrees of precision depending upon the number of cases. When the number of cases approximates 2200, ranges for the comparable registered nurse population would be  $\pm 2.1\%$  of the tabled values. The precision of sample estimates decreases with sample size. Subgroup percentages based on 400 cases will vary  $\pm 4.9\%$  around the tabled value; those based on 200 cases will vary  $\pm 6.9\%$ .

## CHAPTER 2. PROFILE OF REGISTERED NURSES

### Demographic Characteristics

Registered nurses who were working in California were slightly older in 1997 than in 1990, even though there has been a marked decline in both the younger and older age groups (under 40 and 65 and older). The average age has increased steadily, from 43 in 1990, to 44 in 1993, and 45 in 1997. Over the eight year period, there was a 32% decrease in the proportion of nurses under 40 and a 42% decrease in those 65 and over. At the same time, nurses between 40 and 54 increased 42%. This has led to a more homogeneously middle-aged work force. Almost 70% of the state's nurses are between 35 and 54.

The ethnic diversity of the nursing population has increased somewhat between 1990 and 1997. The proportion of non-Hispanic whites has declined 16% to 66% of the employed population. While there have been modest increases in the proportions of African-Americans and Hispanics (up 2% and 32% respectively), the most dramatic change has been a virtual doubling of Asians among the registered

nurse population (up 80%). One in five registered nurses in California are of Asian background, with two-thirds of that number from the Philippines.

The proportion of men in California's registered nurse population has increased steadily (from 5.4 to 7.4%).

Although response rates were slightly higher among those living in the state's less populated areas (the coastal regions and central valley), a little over half of the respondents represent California's major urban areas (Los Angeles, San Bernardino, and Orange counties as well as the Bay Area) with another 30% coming from San Diego, San Jose and the Sacramento region. There appears to be no significant shift in the geographic distribution of the registered nurse population over the past eight years.

Figure 2.1 Age Distribution by Survey Year

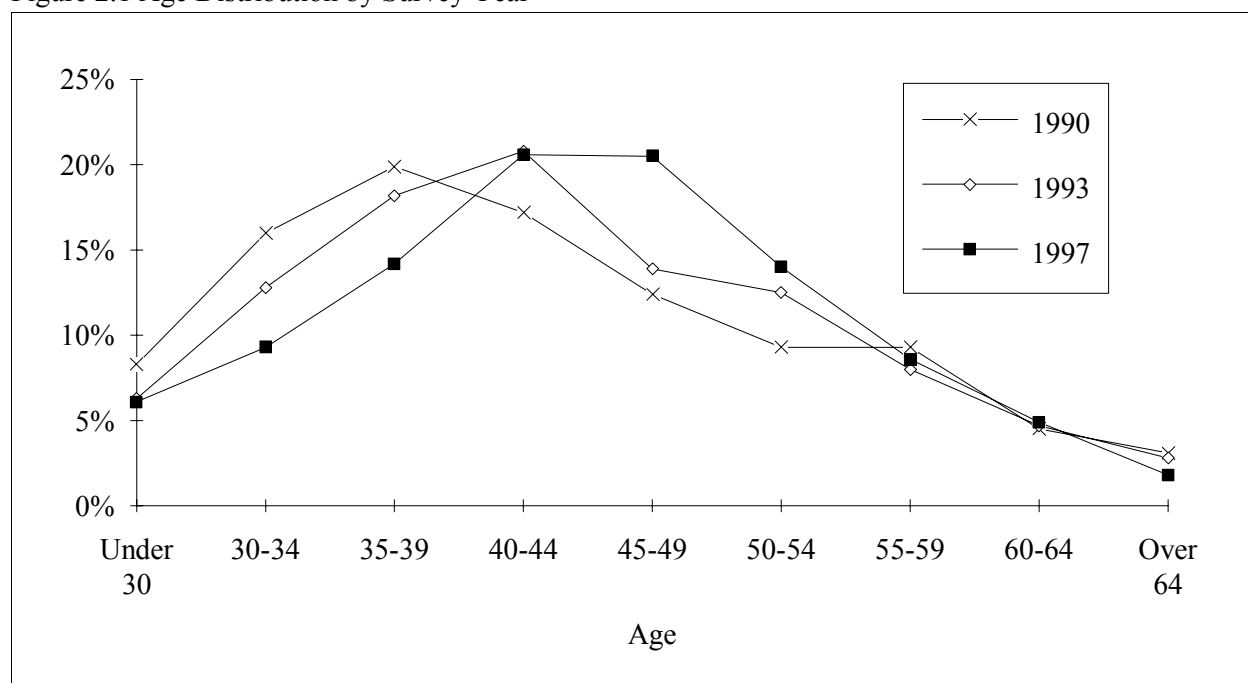


Figure 2.2 Ethnic Distribution by Survey Year

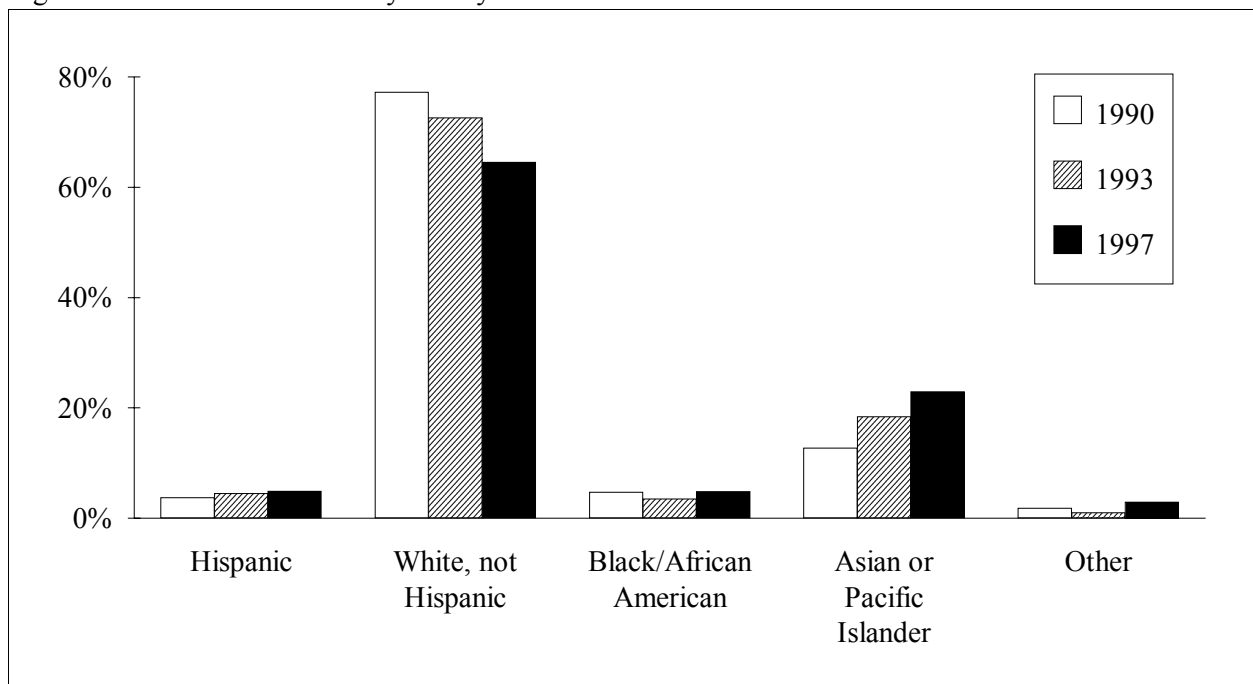


Figure 2.3 Geographic Distribution of Registered Nurses in 1997

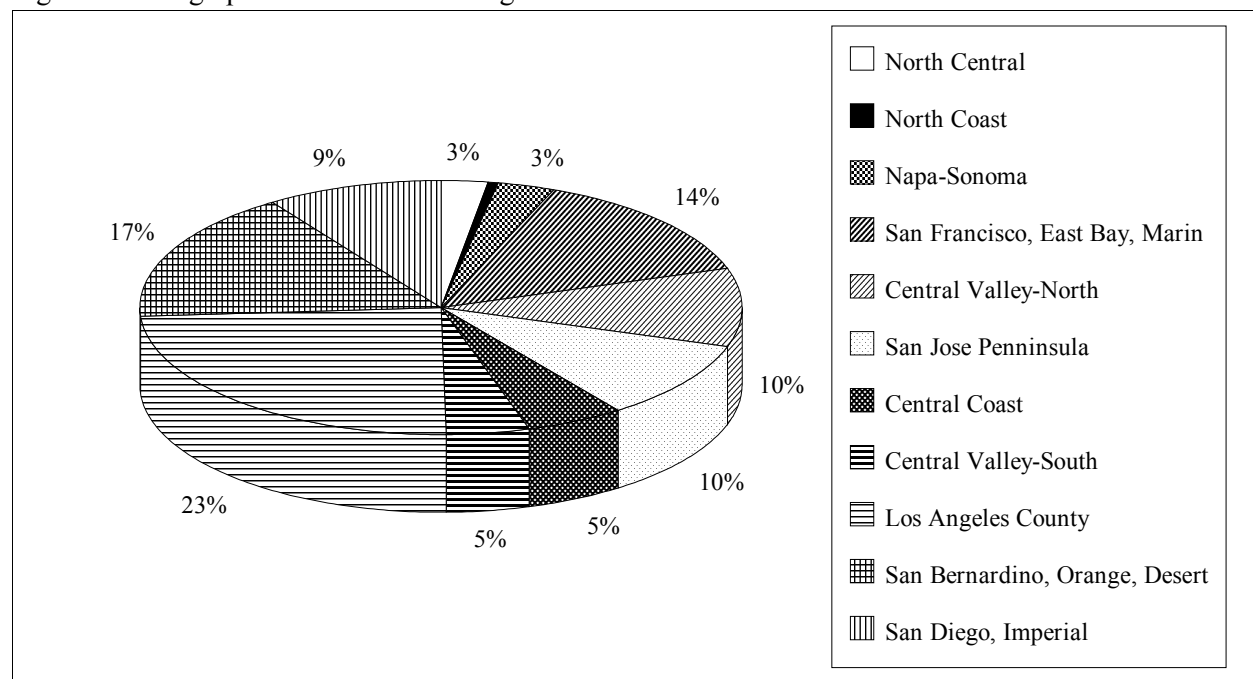
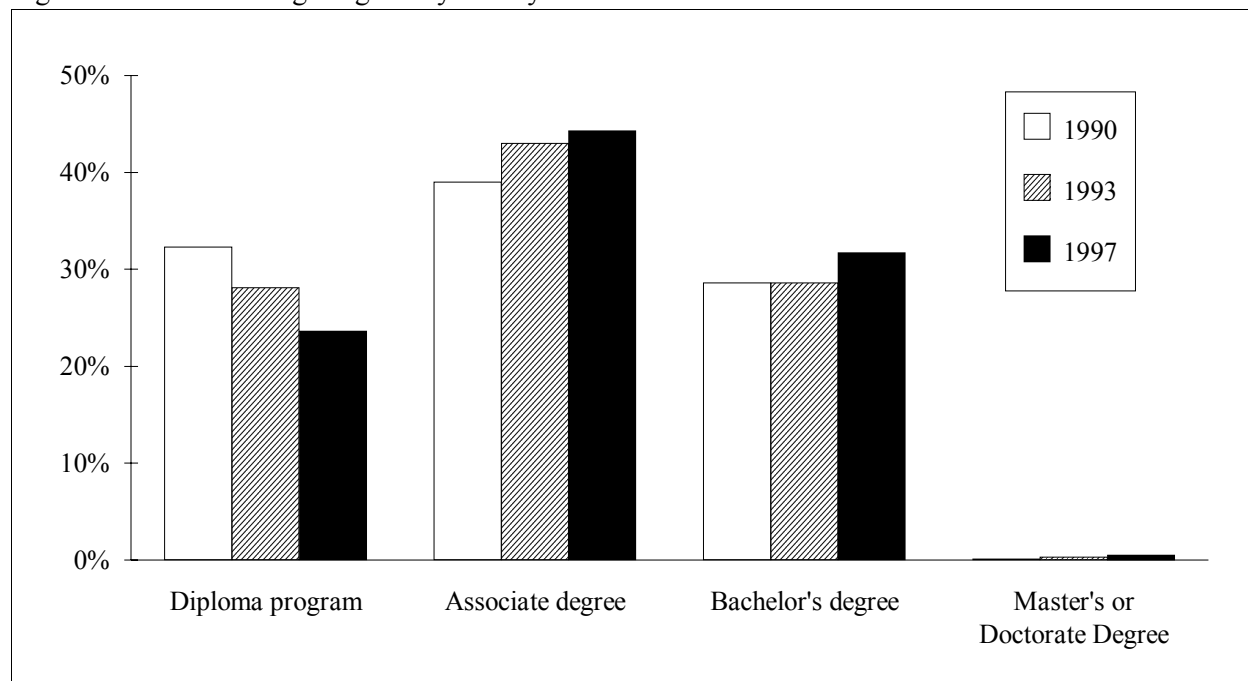


Figure 2.4 Basic Nursing Program by Survey Year



### Educational Preparation

Consistent with national trends, diploma programs are declining as the source of basic nursing education among registered nurses in California. In 1997, only a fourth of currently licensed RNs had received their initial pre-licensure nursing education through a diploma program, down from 32% in 1990. Associate and baccalaureate degree programs are increasing at roughly similar rates as the source of basic nursing education. In 1997, 44% of the state's registered nurses received their initial pre-licensure nursing education in an associate degree program, while another 32% received it through a baccalaureate degree program. Almost half of California's registered nurses received their basic nursing education in the 1970s or earlier.

A little over half of the registered nurses received their pre-licensure nursing education in California (55%) -- a proportion that has increased slightly since 1990. During that time period, the proportion receiving this education out of state has decreased significantly (from 34% to 24%), while the proportion receiving it in another country is up 61%. This

growth is largely accounted for by a doubling of the proportion educated in the Philippines (to 13% in 1997).

Today most registered nurses hold a baccalaureate or associate degree as their highest level of nursing education (38% and 37% respectively). Only one in five hold a diploma in nursing as their highest nursing degree. Between 1990 and 1997, the highest level of nursing education shifted away from diploma programs towards baccalaureate and associate degrees. While the percentage of registered nurses whose highest education was a diploma program decreased 30% from 1990 to 1997, the percentage with baccalaureate and associate degrees increased 13% and 8%, respectively.

While most registered nurses do not seek further education beyond their basic nursing program (for 83%, their initial nursing education is the highest they received), the nineties saw an increasing tendency for those with diplomas and associate degrees to continue their education. There was a 26% increase in additional nursing degrees among those who started with a diploma program and a

Figure 2.5 Highest Nursing Education by Survey Year

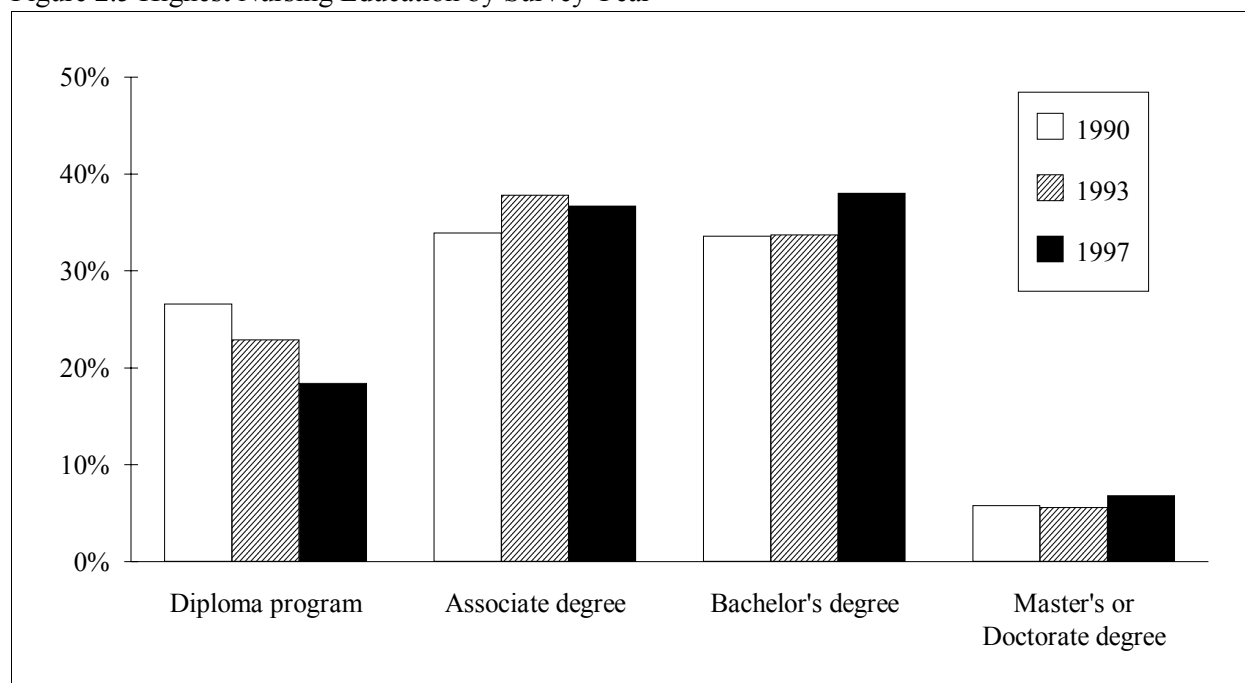


Table 2.1 Highest Nursing Education by Basic Nursing Program and Survey Year

|                           |                           | Basic Nursing Program |                  |                   |
|---------------------------|---------------------------|-----------------------|------------------|-------------------|
| Highest nursing education |                           | Diploma program       | Associate degree | Bachelor's degree |
| 1990 Survey               | Diploma program           | 82.4                  | .0               | .0                |
|                           | Associate degree          | .0                    | 87.0             | .0                |
|                           | Bachelor's degree         | 14.3                  | 11.4             | 86.0              |
|                           | Master's/ Doctoral degree | 3.3                   | 1.6              | 14.0              |
|                           | Total                     | 100.0                 | 100.0            | 100.0             |
| Number of cases           |                           | 721                   | 869              | 637               |
| 1993 Survey               | Diploma program           | 81.4                  | .0               | .0                |
|                           | Associate degree          | .3                    | 87.6             | .0                |
|                           | Bachelor's degree         | 13.5                  | 10.2             | 89.6              |
|                           | Master's/ Doctoral degree | 4.9                   | 2.2              | 10.4              |
|                           | Total                     | 100.0                 | 100.0            | 100.0             |
| Number of cases           |                           | 617                   | 945              | 627               |
| 1997 Survey               | Diploma program           | 77.9                  | .0               | .0                |
|                           | Associate degree          | 1.4                   | 82.2             | .0                |
|                           | Bachelor's degree         | 14.4                  | 14.4             | 89.0              |
|                           | Master's/Doctoral degree  | 6.3                   | 3.3              | 11.0              |
|                           | Total                     | 100.0                 | 100.0            | 100.0             |
| Number of cases           |                           | 575                   | 1,080            | 774               |

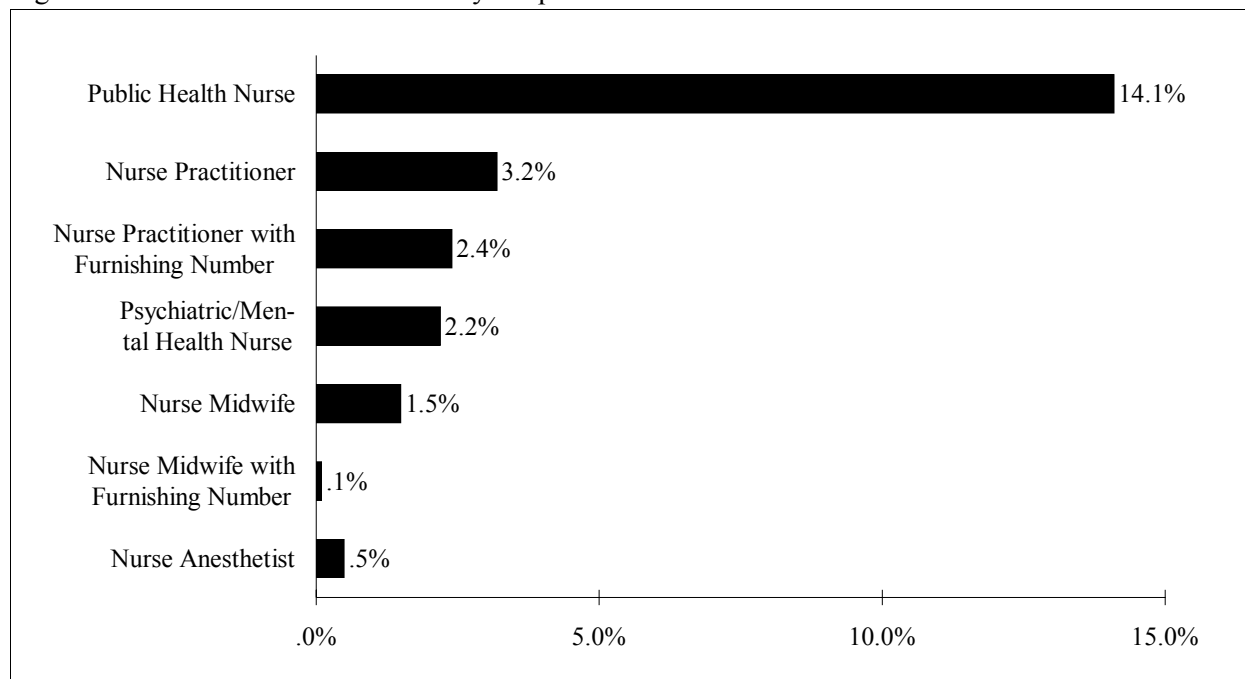
36% increase for those who began with an associate degree. Most of this group who pursued further education earned a bachelor's degree, but increasing numbers completed a master's or doctorate. (Table 2.1)

Approximately three-fourths of registered nurses in California have no additional certifications. For those certified, the most common were public health (14% in 1997) and nurse practitioner (5.6%).

### Licensure

Most registered nurses in California were first licensed in the U.S. (83.6%) -- a proportion that has declined slightly since 1990. The increased proportion who were originally licensed in another country is largely accounted for by a doubling of those first licensed in the Philippines (from 5.3 to 10%). Nurses in 1997 report being older when first licensed in California (29.8 in 1997 vs 28.7 in 1990). (Table A-5)

Figure 2.6 Certification for 1997 Survey Respondents



### Work Setting

**Primary nursing position.** As has been the case for the last two surveys, three-fifths of all employed registered nurses are and have been direct patient care providers. Another 11% occupy middle management positions in a service setting, while half that number serve as patient care coordinators or case managers -- a job designation which has doubled since 1990. A little less than 5% are in senior management positions in a service setting.

Direct client care consumes 65% of nursing activities, with another 18% of work hours devoted to indirect client care, including planning, consulting, assigning and teaching staff and evaluating care. Administration and management tasks make up 13% of work hours.

Fifty-nine percent of respondents have been in their current positions five or more years, up from 50% in 1990. This is largely due to a 45% increase in nurses working more than 14 years for a single organization and a 20% decrease in the proportion employed less than 5 years in their current job.

**Organization.** The proportion of registered nurses employed in acute hospital settings has declined steadily from 67.9% in 1990 to 60.2% in 1997. Indicative of that decline, almost one in five nurses not currently working in an acute hospital had been so employed in the last 24 months. A decrease also occurred in the proportions employed in an ambulatory care setting, down 24% from 11.8 to 9.0% over the seven year period. Employment has also decreased in academic nursing programs and student health services, in public and occupational or employee health, in mental health or drug and alcohol treatment programs and in self-employment. In contrast, employment of registered nurses in home nursing care has increased 79% (from 3.8 to 6.8%) and employment in skilled nursing/extended care facilities has increased 27% (from 5.6 to 7.1%). In 1997, one in seven nurses was employed in these two settings, compared to one in eleven in 1990.

**Clinical area.** Consistent with changes in work setting described above, the proportion of medical/surgical nurses has declined 23% since 1990. Significant decreases have also occurred in the proportion employed as public or mental health nurses (down

52% and 33% respectively). Conversely, noticeable increases have occurred in the proportion of nurses working in geriatrics and perioperative/anesthesia. In 1997, the most common clinical areas were medical/surgical (26.3%), critical care (17.1%), geriatrics (10.3%) and obstetrics (9.7%).

**Breaks in nursing employment.** The proportion who have stopped working as a registered nurse for more than a year has decreased from 25.1% in 1990 to 19.2% in 1997. Childcare and family responsibilities and dissatisfaction with the profession have declined as reasons for withdrawal from the nursing workforce. Returning to school, trying another

Table 2.2 Work Setting Characteristics by Survey Year

|                          |  | 1990<br>% | 1993<br>% | 1997<br>% |
|--------------------------|--|-----------|-----------|-----------|
| Primary nursing position | Senior management, service setting         | 4.0       | 3.5       | 4.6       |
|                          | Middle management, service setting         | 12.5      | 14.5      | 11.4      |
|                          | Direct patient care provider               | 62.6      | 59.5      | 62.1      |
|                          | Clinical nurse specialist                  | 3.2       | 3.2       | 3.1       |
|                          | Certified registered nurse anesthetist     | .5        | .5        | .3        |
|                          | Certified nurse midwife                    | .4        | .2        | .1        |
|                          | Nurse practitioner                         | 2.2       | 1.8       | 3.2       |
|                          | Educator, service setting                  | 1.7       | 2.0       | .9        |
|                          | Management/administrator, academic setting | .7        | .2        | .3        |
|                          | Educator, academic setting                 | 1.2       | 1.3       | 1.0       |
|                          | School nurse                               | 2.0       | 1.6       | 2.0       |
|                          | Public health nurse                        | 2.2       | 2.2       | 1.5       |
|                          | Patient care coordinator/case manager      | 2.7       | 4.5       | 5.6       |
|                          | Consultant                                 | .8        | .9        | 1.1       |
|                          | Researcher                                 | .2        | .8        | .4        |
|                          | Other                                      | 3.1       | 3.3       | 2.6       |
|                          | Total                                      | 100.0     | 100.0     | 100.0     |
|                          | <i>Number of cases</i>                     | 2,227     | 2,190     | 2,375     |
| Organization             | Acute hospital                             | 67.9      | 64.3      | 60.2      |
|                          | Skilled nursing/extended care facility     | 5.6       | 5.1       | 7.1       |
|                          | Academic nursing program                   | 1.3       | 1.5       | .8        |
|                          | Public health/community health program     | 3.4       | 2.5       | 2.7       |
|                          | Home nursing care                          | 3.8       | 5.9       | 6.8       |
|                          | Ambulatory care setting                    | 11.8      | 10.9      | 9.0       |
|                          | Occupational health/employee health        | 1.5       | .8        | .7        |
|                          | Student health service                     | 2.1       | 1.6       | 1.5       |
|                          | Mental health/drug, alcohol treatment      | ...       | 2.9       | 1.8       |
|                          | Insurance organization                     | ...       | .0        | 1.6       |
|                          | Self employed                              | 1.1       | .7        | .5        |
|                          | Other                                      | 1.5       | 3.8       | 7.3       |
|                          | Total                                      | 100.0     | 100.0     | 100.0     |
|                          | <i>Number of cases</i>                     | 2,212     | 2,164     | 2,444     |
| Clinical area            | Medical/surgical                           | 34.0      | 31.0      | 26.3      |
|                          | Geriatrics                                 | 5.6       | 6.5       | 10.3      |
|                          | Pediatrics                                 | 5.6       | 4.5       | 6.3       |
|                          | Obstetrics/reproductive health             | 9.4       | 10.1      | 9.7       |
|                          | Community/public health                    | 7.7       | 7.9       | 3.7       |
|                          | Psychiatric/mental health                  | 5.8       | 4.7       | 3.9       |
|                          | Perioperative/anesthesia                   | 6.3       | 7.2       | 8.4       |
|                          | Emergency/trauma                           | 5.4       | 6.1       | 5.8       |
|                          | Critical care                              | 15.9      | 16.3      | 17.1      |
|                          | Other                                      | 4.2       | 5.8       | 8.5       |
|                          | Total                                      | 100.0     | 100.0     | 100.0     |
|                          | <i>Number of cases</i>                     | 2,233     | 2,186     | 2,347     |

occupation, and stress on the job were increasingly cited as reasons for the withdrawal. Nevertheless, in 1997, the most common reasons for withdrawal from nursing are childcare and family responsibilities (73.5%), moving to a new area (29.1%), trying another occupation (15.2%) and returning to school (14.8%). (These percentages sum to more than 100% because more than one response could be chosen.)

**Future nursing work plans.** A majority (57%) plan to continue working a similar number of hours for the next five years -- up from 46% in 1990. Significantly fewer plan to reduce their work hours (25% -- down from 33% seven years earlier) or leave nursing entirely (10% -- down by a third from the 1990 figure).

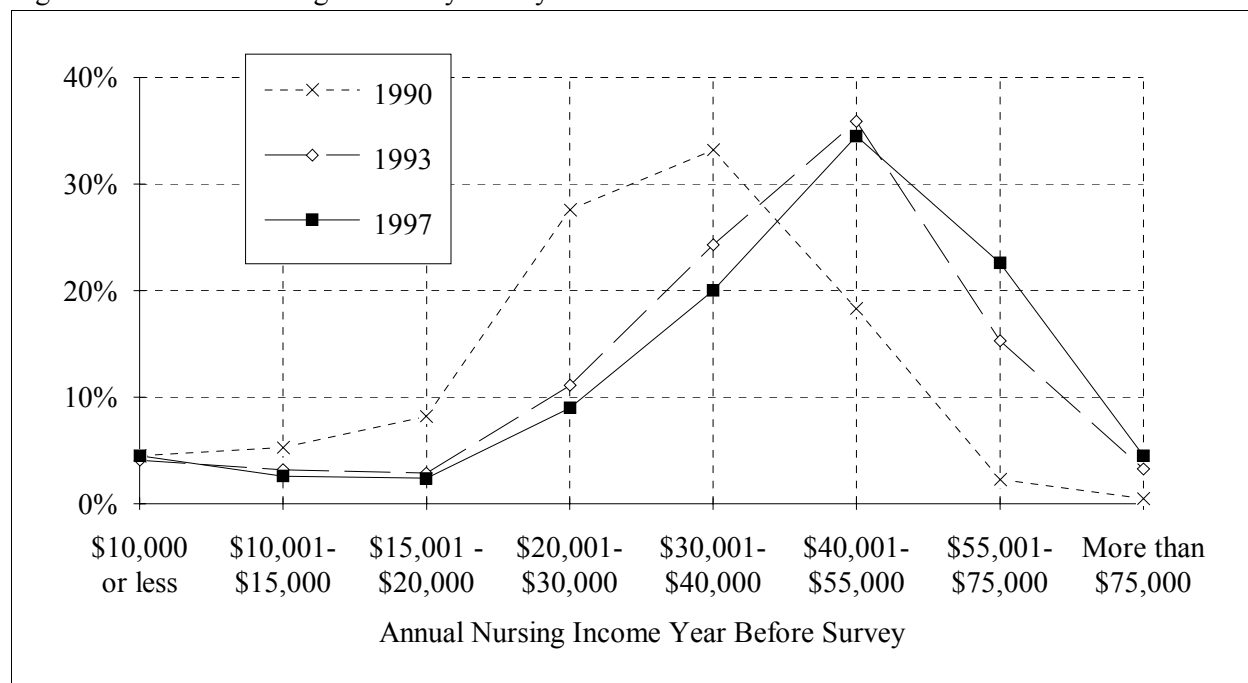
If their current position were no longer available, respondents clearly preferred another with a similar environment and work hours. A third would not be interested if retooling or retraining were necessary and 70% would not consider relocation.

**Number of positions.** Three-fourths of respondents

hold a single nursing position. The proportion holding two or more steadily increased from 1990 to 1997. The proportion of employed nurses who also work in non-nursing positions has remained small (8% in 1990 and 1997); but the average hours worked in these positions has more than doubled from 7.8 hours per week in 1990 to 18.1 hours in 1997. Most of those employed in non-nursing positions work more than half-time in nursing. Roughly one in five persons employed in a non-nursing position work full time in that position; but three in five work 16 hours a week or less. Thus, non-nursing positions appear to supplement employment in nursing, rather than the reverse. (Table A-2, Question 29)

**Hours.** The standard work week for registered nurses employed in nursing has remained constant at 36.3 hours since the 1993 survey, having increased slightly over 1990 when the mean was 36.1. What has changed is a significant reduction in the variability around the mean. That is, work hours are more concentrated around the average than they have been; fewer employed nurses are working less

Figure 2.7 Annual Nursing Income by Survey Year



than 33 hours or more than 41 than was true in 1990. (Table A-2, Question 26)

The sample is evenly split between working 8 hour days and 9 to 12 hour days (45% and 43% respectively), yielding an average of 9.1 hours per day. Working overtime an hour or more without advance notice is a common experience, shared by two-thirds of the respondents. For almost half of the sample the amount of unplanned overtime averages between one and four hours per week. For one in six, it averages more than five hours a week. In contrast, a third of respondents worked virtually no unplanned overtime. (Table A-2, Question 28)

**Changes to time base.** No change in time base was reported by approximately three-fourths of the sample during the 12 months preceding the survey. Similar proportions reported reductions and increases in the hours worked (7.9 and 7.4% respectively), while 1.7% were laid off. Ten percent experienced other changes in their time base.

**Employment through temporary agency.** The proportion employed in nursing through a temporary agency has increased slightly from 5.2% in 1990 to 6.5% in 1997. The reasons for temporary employment, however, have changed markedly. Wages and control of schedule and work location have declined considerably; waiting for a desirable permanent position has increased three-fold.

**Income.** Income earned from nursing has risen dramatically in the past eight years: up 43% between 1990 and 1997. Most of the increase occurred between 1990 and 1993 when mean income rose 34%. In 1990, almost 80% of registered nurses were earning between \$20,001 and \$55,000; in 1993 and 1997, similar proportions (76% and 77% respectively) earned between \$30,001 and \$75,000. The average nursing income was \$31,504 in 1990, \$42,163 in 1993, and \$45,073 in 1997. Variability in nursing income increased as well, with one in five nurses earning less than \$30,000 and close to 5% earning more than \$75,000. Nursing income rose faster than household income for the same period. At the aggregate level, the mean income from nursing in 1990 constituted 58% of mean household income; in 1997 that figure had risen to 70%. Individually, however, respondents indicated that nursing income made up 39% of household income in 1997, up 13% over that proportion in 1990. Clearly, by 1997, income from nursing had risen substantially and constituted a larger share of household income than at the beginning of the decade.

### CHAPTER 3. RELATIONSHIPS BETWEEN WORK SETTING CHARACTERISTICS

**Interrelationship of position, clinical area and organization.** Most direct patient care providers and clinical nurse specialists (75% and 63% respectively) work in acute hospital settings, with a significant subgroup of clinical nurse specialists also employed in ambulatory care settings (16%). Nurse practitioners, by contrast, are largely employed in ambulatory care settings (60%). Only a third of patient care coordinator/case managers work in acute hospitals, with another 21% employed in home nursing care. Another third work in other settings, including insurance organizations (14%). Management positions, while more concentrated in acute hospitals, are reasonably dispersed across work settings. Management positions generally represent the distribution of clinical areas in the respondent population; but they significantly over-represent geriatrics and medical/surgical areas. (Table 3.1)

Respondents working in critical or emergency care or in perioperative/anesthesia work almost exclusively in acute hospitals, with 20% of the latter in ambulatory care or other settings. Obstetrics is concentrated in acute hospitals (76%) and ambulatory care settings (13%), while pediatrics is more dispersed among acute hospitals (48%), ambulatory care (20%) and other settings (21%). Three-fifths of respondents working in geriatrics are employed in skilled nursing/extended care facilities, while one in five work in home nursing care. Although medical/surgical specialists are concentrated in acute hospitals (65%), they are employed in significant numbers in ambulatory and other settings and in home nursing care (13.3 to 9.2%). (Table 3.2)

**Effect of position, organization and clinical area on other work setting characteristics.** Respondents in senior and middle management positions work more hours per week (43 and 38 respectively) than those in non-management positions (33 hours overall). They also work more unscheduled overtime than those in other positions (3.8 and 3.4 vs 2.3 for most other positions). Managers are more likely than many to hold more than one nursing position (26 - 28%), although nurse practitioners and certified nurse specialists are most likely of all to hold multiple positions (31 - 32%). Job tenure is greatest among certified nurse specialists and school nurses (10.1 and 9.8 years respectively) --

well above the 8.2 years average for the sample -- and lowest for the rapidly developing position of patient care coordinator/case manager (4.5 years). Layoffs were most common among nurse practitioners (5.4%) and senior management (4.7%), whereas reductions in time base occurred most often among case managers (9.5%), direct patient care providers (8.8%) and clinical nurse specialists (8.3%). (Table 3.3)

Increases in the time base occurred primarily among public health nurses (14.7%), clinical nurse specialists (11.1%) and nurse practitioners (10.8%). The pairing of either high lay-offs or reductions in time base with significant increases in the time base suggests a consolidation of the workforce resulting in more hours from fewer people. These adjustments occurred in two of the three positions that are concentrated in acute hospital or ambulatory care settings (clinical nurse specialists and nurse practitioners). In the third case (direct patient care providers), a high proportion of reductions in time base was paired with a high proportion employed through a temporary agency. Thus, changes in time base experienced by certain types of registered nurses in 1997 resulted in reduced work hours among some in a specialty while increasing those of others in the same specialty or hiring more temporary employees. (Table 3.3)

Type of work organization has a marked effect on several work setting characteristics. Hours worked per day are much higher in acute hospitals than in other work settings (9.8 hrs per day vs 8.1 to 8.4 in other organizations). Unscheduled overtime is more characteristic of home nursing care and skilled nursing facilities (3.4 and 2.8 hrs vs an average of 2.5). Holding more than one nursing position is more typical of those employed in acute hospitals and in home nursing care; it is least characteristic of those employed in an ambulatory care setting. Tenure is greatest among those employed in acute hospitals (9.4 years) and least among those employed in home nursing (4.3 years). Layoffs occurred disproportionately in public health and ambulatory care settings while reductions in time base were unusually high in acute hospitals. Increases in time base occurred in the two areas with more than average layoffs: public health and ambulatory care. Heavy dependence upon temporary employment

(14.8%) occurred in the same setting as the third largest increase in time base -- home nursing care.

Nurses employed in pediatrics and obstetrics have noticeably shorter work weeks than other clinical areas (32.2 and 33.4 hours/week compared with an average of 36.3). Critical care, emergency and obstetrics have longer work days (10.7, 10.3 and 9.6 respectively). Unscheduled overtime is more characteristic of perioperative/anesthesia, mental health, critical care and geriatrics (2.9 and 2.8 extra hours per week). Respondents working in emergency or trauma care were twice as likely to hold more than one nursing position as those in other clinical areas (51.9% compared with a 23.6 average). Tenure was greatest in perioperative/anesthesia, critical care, and obstetrics.

Layoffs were more common in mental and public health (4.4 and 3.6% respectively) and in emergency care (3.1%). Unusually high reductions in time base occurred most often in perioperative/anesthesia (12.2%), geriatrics (8.9%) and obstetrics (8.4%), while significant increases occurred in the same three areas. (Table 3.3)

Almost two-thirds (60%) of nurses who work for a temporary agency or registry hold more than one nursing position. Only a third as many (21%) nurses in regular employment hold multiple jobs. Registry employees work the same number of hours per day (9.1), although they average slightly fewer hours per week (34.0 vs 34.7) and put in slightly more unscheduled overtime (2.9 vs. 2.5 hours per week). Within the past twelve months, temporary employees were more likely to have been laid off (3.3% vs 1.5% among regular employees), or to have experienced changes in time base -- 13% had reductions (vs 7.5% for regular employees) and 9.9% had increases (vs. 7.2% for the others). (Table 3.3)

**Characteristics related to nursing income.** Advanced practice certifications (Nurse Anesthetist, Nurse Midwife, Nurse Practitioner, and Psychiatric/Mental Health Nurse) offered less of an income advantage in 1997 than they had in 1993. While those with certificates in 1993 earned 15% more than those without, this income advantage had decreased to 8% in 1997. This decline occurred because, while average income for other types of nurses increased, average income for advanced practice nurses declined 5%

during that time period. (Table 3.4) Over the eight year period, management and direct patient care providers experienced the greatest increase in income (up 47% and 45% respectively), while advanced practice nurses experienced the least (up 27%). Although nurses employed by temporary agencies earn less than those hired directly by service providers, this salary differential is largely explained by other features of the work setting.

Only senior and middle management positions lead to notably higher incomes among registered nurses. Nurse practitioners earn somewhat more than others, while direct patient care providers and clinical nurse specialists earn somewhat less. (Table 3.4) Work setting, however, has a significant impact on nursing income. Nurses employed in acute care hospitals earn more than those employed in other settings, while those employed in skilled nursing and extended care facilities earn less. The salary differentials between organizations employing registered nurses remained relatively constant over the decade. The only exception was a marked increase in salaries paid in ambulatory care settings. In 1990 and 1993, average salaries paid in ambulatory care settings ranked fifth; in 1997, their average salaries moved to third place, behind acute hospitals and "other" settings. (Table 3.4)

Only perioperative/anesthesia and critical care nurses earn significantly more than those in other clinical areas. However, experience as an RN differentiated salaries much more in 1997 than it did in 1990. For 1990 respondents, salaries plateaued at 15 - 24 years of experience, with no salary advantage accruing to those with more than 24 years in the field. This was not the case in 1997. Whereas the most experienced nurses earned 25% more than the least experienced in 1990, they earned 50% more in 1997. (Table 3.4)

Table 3.1 Organization and Clinical Area by Nursing Position

|               |  | Senior management, service setting % | Middle management, service setting % | Direct patient care provider % | Clinical nurse specialist % | Nurse Practitioner % | School nurse % | Public health nurse % | Patient care coordinator/case manager % | Other % |
|---------------|--|--------------------------------------|--------------------------------------|--------------------------------|-----------------------------|----------------------|----------------|-----------------------|---|---------|
| Organization  | Acute hospital                         | 33.9                                 | 47.4                                 | 74.9                           | 63.4                        | 13.7                 | .0             | .0                    | 31.3                                    | 33.5    |
|               | Skilled nursing/extended care facility | 16.5                                 | 15.3                                 | 4.9                            | 4.2                         | 4.1                  | 2.3            | .0                    | 4.7                                     | 9.7     |
|               | Public health/community health program | .0                                   | 3.4                                  | 1.1                            | 1.4                         | 9.6                  | 4.5            | 67.6                  | 3.1                                     | .6      |
|               | Home nursing care                      | 14.7                                 | 8.6                                  | 5.2                            | 2.8                         | 1.4                  | .0             | 20.6                  | 21.1                                    | 4.5     |
|               | Ambulatory care setting                | 13.8                                 | 12.3                                 | 6.4                            | 15.5                        | 60.3                 | 2.3            | .0                    | 4.7                                     | 7.7     |
|               | Other                                  | 21.1                                 | 13.1                                 | 7.4                            | 12.7                        | 11.0                 | 90.9           | 11.8                  | 35.2                                    | 43.9    |
|               | Total                                  | 100.0                                | 100.0                                | 100.0                          | 100.0                       | 100.0                | 100.0          | 100.0                 | 100.0                                   | 100.0   |
|               | <i>Number of cases</i>                 | 109                                  | 268                                  | 1,456                          | 71                          | 73                   | 44             | 11                    | 128                                     | 155     |
| Clinical Area | Medical/surgical                       | 29.5                                 | 25.3                                 | 26.7                           | 30.9                        | 9.5                  | .0             | 9.4                   | 39.5                                    | 30.0    |
|               | Geriatrics                             | 26.9                                 | 20.5                                 | 6.8                            | 2.9                         | 10.8                 | .0             | 9.4                   | 17.7                                    | 16.4    |
|               | Pediatrics                             | 5.1                                  | 3.2                                  | 5.7                            | 8.8                         | 16.2                 | 48.8           | 3.1                   | 1.6                                     | 4.3     |
|               | Obstetrics/reproductive health         | 5.1                                  | 7.6                                  | 10.8                           | 13.2                        | 27.0                 | .0             | 3.1                   | 1.6                                     | 10.7    |
|               | Community/public health                | 6.4                                  | 5.2                                  | 1.3                            | .0                          | 5.4                  | 11.6           | 59.4                  | 9.7                                     | 5.0     |
|               | Psychiatric/mental health              | 7.7                                  | 6.0                                  | 2.9                            | 10.3                        | .0                   | .0             | .0                    | 5.6                                     | 5.0     |
|               | Perioperative/anesthesia               | 5.1                                  | 8.8                                  | 10.0                           | 10.3                        | 1.4                  | .0             | .0                    | .0                                      | 6.4     |
|               | Emergency/trauma                       | 2.6                                  | 7.2                                  | 7.1                            | 5.9                         | 2.7                  | .0             | 3.1                   | .8                                      | 2.9     |
|               | Critical care                          | 9.0                                  | 10.0                                 | 22.4                           | 16.2                        | 1.4                  | .0             | .0                    | 5.6                                     | 4.3     |
|               | Other                                  | 2.6                                  | 6.0                                  | 6.3                            | 1.5                         | 25.7                 | 39.5           | 12.5                  | 17.7                                    | 15.0    |
|               | Total                                  | 100.0                                | 100.0                                | 100.0                          | 100.0                       | 100.0                | 100.0          | 100.0                 | 100.0                                   | 100.0   |
|               | <i>Number of cases</i>                 | 78                                   | 249                                  | 1,432                          | 68                          | 74                   | 43             | 32                    | 124                                     | 140     |

Table 3.2 Organization by Clinical Area

|  | Medical/surgical % | Geriatrics % | Pediatrics % | Obstetrics/reproductive health % | Community/public health % | Psychiatric/mental health % | Perioperative/anesthesia % | Emergency trauma % | Critical care % | Other % |
|--|--------------------|--------------|--------------|----------------------------------|---------------------------|-----------------------------|----------------------------|--------------------|-----------------|---------|
| Acute hospital                         | 64.8               | 6.6          | 47.6         | 76.0                             | 4.6                       | 31.9                        | 80.4                       | 88.1               | 98.2            | 33.2    |
| Skilled nursing/extended care facility | 1.5                | 59.1         | 2.1          | .4                               | .0                        | 5.5                         | .0                         | .0                 | .3              | 2.0     |
| Public health/community health program | .7                 | 1.7          | 3.4          | 3.6                              | 44.8                      | .0                          | .5                         | .7                 | .0              | .5      |
| Home nursing care                      | 9.2                | 19.8         | 5.5          | .9                               | 20.7                      | 3.3                         | .0                         | .0                 | .3              | 9.7     |
| Ambulatory care setting                | 10.5               | 2.9          | 20.0         | 13.3                             | 8.0                       | 1.1                         | 9.8                        | 5.2                | .5              | 22.4    |
| Other                                  | 13.3               | 9.9          | 21.4         | 5.8                              | 21.8                      | 58.2                        | 9.3                        | 6.0                | .8              | 32.1    |
| Total                                  | 100.0              | 100.0        | 100.0        | 100.0                            | 100.0                     | 100.0                       | 100.0                      | 100.0              | 100.0           | 100.0   |
| <i>Number of cases</i>                 | 608                | 242          | 145          | 225                              | 87                        | 91                          | 194                        | 134                | 396             | 196     |

Table 3.3 Selected Work Setting Characteristics by Position, Organization and Clinical Area

|                                    |  | Average hours worked as RN |         |                               | Percent with more than one nursing position | Average years in main nursing position | Percent whose employer changed time base within the last 12 months |         |           | Percent employed through a temporary agency | Number of cases |
|------------------------------------|--|----------------------------|---------|-------------------------------|---|--|--|---------|-----------|---|-----------------|
|                                    |  | Per week                   | Per day | Unscheduled overtime per week |   |  | Laid off   | Reduced | Increased |   |                 |
| Position                           | Senior management, service setting     | 42.7                       | 8.9     | 3.8                           | 26.4  | 6.0                                    | 4.7  | 1.9     | 4.7       | 3.6   | 93-110          |
|                                    | Middle management, service setting     | 38.4                       | 9.1     | 3.4                           | 28.0  | 8.7                                    | 2.3  | 7.2     | 8.4       | 2.6   | 249-269         |
|                                    | Direct patient care provider           | 33.2                       | 9.5     | 2.3                           | 22.6  | 8.7                                    | 1.2  | 8.8     | 6.9       | 8.3   | 1,403-1,461     |
|                                    | Clinical nurse specialist              | 33.5                       | 8.7     | 2.4                           | 31.9  | 10.1                                   | 2.8  | 8.3     | 11.1      | 6.9   | 69-72           |
|                                    | Nurse practitioner                     | 31.1                       | 7.6     | 2.3                           | 30.7  | 6.3                                    | 5.4  | 4.1     | 10.8      | 5.3   | 66-76           |
|                                    | School nurse                           | 30.6                       | 7.3     | 2.3                           | 19.1  | 9.8                                    | .0   | 4.3     | 4.3       | 2.1   | 42-47           |
|                                    | Public health nurse                    | 36.4                       | 8.5     | 2.3                           | 26.5  | 6.7                                    | .0   | 5.9     | 14.7      | 8.6   | 33-35           |
|                                    | Patient care coordinator/case manager  | 37.1                       | 8.3     | 2.7                           | 14.4  | 4.5                                    | .8   | 9.5     | 6.3       | 5.4   | 121-132         |
|                                    | Other                                  | 35.1                       | 8.2     | 2.2                           | 25.6  | 6.2                                    | 3.3  | 5.9     | 8.6       | 3.9   | 143-156         |
| Organization                       | Acute hospital                         | 34.6                       | 9.8     | 2.5                           | 24.1  | 9.4                                    | 1.2  | 8.7     | 7.0       | 6.3   | 1,385-1,452     |
|                                    | Skilled nursing/extended care facility | 35.9                       | 8.4     | 2.8                           | 21.6  | 6.1                                    | 1.8  | 6.5     | 7.1       | 5.3   | 159-172         |
|                                    | Public health/community health program | 34.4                       | 8.2     | 2.3                           | 21.9  | 8.2                                    | 3.1  | 7.7     | 10.8      | 7.6   | 63-66           |
|                                    | Home nursing care                      | 35.5                       | 8.2     | 3.4                           | 24.4  | 4.3                                    | 1.3  | 7.6     | 8.3       | 14.8  | 146-162         |
|                                    | Ambulatory care setting                | 33.8                       | 8.1     | 2.2                           | 20.8  | 7.6                                    | 2.8  | 6.5     | 10.2      | 4.1   | 205-217         |
|                                    | Other                                  | 34.5                       | 8.1     | 2.3                           | 23.9  | 6.5                                    | 2.4  | 6.5     | 6.5       | 6.0   | 316-349         |
| Clinical Area                      | Medical/surgical                       | 34.8                       | 9.0     | 2.6                           | 17.1  | 7.9                                    | 1.5  | 6.8     | 6.3       | 6.1   | 575-611         |
|                                    | Geriatrics                             | 36.3                       | 8.3     | 2.8                           | 25.1  | 5.0                                    | 2.6  | 8.9     | 8.9       | 8.0   | 221-238         |
|                                    | Pediatrics                             | 32.2                       | 8.7     | 1.8                           | 20.8  | 8.5                                    | 1.4  | 6.2     | 6.8       | 4.8   | 140-146         |
|                                    | Obstetrics/reproductive health         | 33.4                       | 9.6     | 2.2                           | 23.7  | 9.6                                    | 1.3  | 8.4     | 8.9       | 5.8   | 217-227         |
|                                    | Community/public health                | 36.6                       | 8.4     | 2.6                           | 27.4  | 7.3                                    | 3.6  | 6.0     | 4.8       | 7.0   | 80-86           |
|                                    | Psychiatric/mental health              | 35.4                       | 8.1     | 2.9                           | 25.8  | 6.0                                    | 4.4  | 5.6     | 5.6       | 6.6   | 87-91           |
|                                    | Perioperative/anesthesia               | 34.1                       | 8.3     | 2.9                           | 22.4  | 10.1                                   | 1.1  | 12.2    | 10.6      | 4.7   | 185-192         |
|                                    | Emergency/trauma                       | 34.5                       | 10.3    | 1.9                           | 51.9  | 9.0                                    | 3.1  | 7.7     | 8.5       | 10.4  | 128-135         |
|                                    | Critical care                          | 34.8                       | 10.7    | 2.8                           | 26.3  | 10.0                                   | .5   | 7.6     | 6.1       | 6.9   | 378-398         |
|                                    | Other                                  | 33.8                       | 8.4     | 2.2                           | 13.1  | 7.8                                    | 2.1  | 10.0    | 8.9       | 5.1   | 178-199         |
| Work for temporary agency/registry | No                                     | 34.7                       | 9.1     | 2.5                           | 21.0  | 8.5                                    | 1.5  | 7.5     | 7.2       | n/a   | 2,146-2,256     |
|                                    | Yes                                    | 34.0                       | 9.1     | 2.9                           | 60.3  | 5.1                                    | 3.3  | 13.0    | 9.9       | n/a   | 144-157         |

Table 3.4 Nursing Income (in Thousands) by Respondent and Work Setting Characteristics and Survey Year

|                                    |  | Mean |      |      | Number of cases |       |       |
|------------------------------------|--|------|------|------|-----------------|-------|-------|
|                                    |  | 1990 | 1993 | 1997 | 90              | 93    | 97    |
| Highest nursing degree             | Diploma program                        | 31.1 | 40.8 | 46.2 | 578             | 485   | 432   |
|                                    | Associate degree                       | 29.9 | 40.6 | 42.8 | 732             | 796   | 873   |
|                                    | Bachelor's degree                      | 32.2 | 43.6 | 45.5 | 728             | 723   | 903   |
|                                    | Master's degree                        | 38.4 | 49.2 | 52.6 | 126             | 121   | 168   |
| Advanced practice certification*   | No                                     | ...  | 41.8 | 44.8 | ...             | 2,003 | 2,212 |
|                                    | Yes                                    | ...  | 47.6 | 48.5 | ...             | 138   | 208   |
| Time base                          | Part-time                              | 24.2 | 31.2 | 33.4 | 792             | 707   | 737   |
|                                    | Full-time                              | 35.7 | 47.6 | 50.3 | 1,394           | 1,434 | 1,665 |
| More than one nursing position     | No                                     | 30.9 | 40.9 | 43.9 | 1741            | 16,91 | 1,799 |
|                                    | Yes                                    | 33.4 | 47.0 | 48.9 | 417             | 439   | 564   |
| Work for temporary agency/registry | No                                     | 31.6 | 42.2 | 45.4 | 2,048           | 1,984 | 2,231 |
|                                    | Yes                                    | 30.1 | 41.9 | 41.6 | 112             | 143   | 158   |
| Position                           | Senior management, service setting     | 40.0 | 57.5 | 62.6 | 89              | 76    | 107   |
|                                    | Middle management, service setting     | 35.0 | 46.8 | 50.0 | 274             | 308   | 264   |
|                                    | Direct patient care provider           | 29.5 | 40.2 | 42.8 | 1,352           | 1,260 | 1,425 |
|                                    | Clinical nurse specialist              | 35.2 | 42.2 | 45.3 | 69              | 66    | 70    |
|                                    | Nurse practitioner                     | 37.0 | 48.2 | 48.1 | 46              | 39    | 76    |
|                                    | School nurse                           | 28.4 | 39.1 | 35.3 | 43              | 32    | 45    |
|                                    | Public health nurse                    | 29.2 | 40.4 | 42.3 | 48              | 46    | 35    |
|                                    | Patient care coordinator/case manager  | 31.5 | 41.6 | 43.1 | 57              | 96    | 131   |
|                                    | Other                                  | 34.8 | 42.1 | 47.4 | 184             | 197   | 154   |
| Position groups                    | Management                             | 36.5 | 48.8 | 53.8 | 379             | 388   | 378   |
|                                    | Advanced practice                      | 39.7 | 52.6 | 50.2 | 64              | 53    | 85    |
|                                    | Direct patient care                    | 29.5 | 40.2 | 42.8 | 1,352           | 1,260 | 1,425 |
|                                    | Other                                  | 31.9 | 40.9 | 43.3 | 367             | 419   | 419   |
| Organization                       | Acute hospital                         | 32.3 | 43.8 | 47.0 | 1,454           | 1,353 | 1,432 |
|                                    | Skilled nursing/extended care facility | 27.8 | 35.3 | 39.1 | 122             | 106   | 168   |
|                                    | Public health/community health program | 31.6 | 39.1 | 42.9 | 73              | 53    | 64    |
|                                    | Home nursing care                      | 28.7 | 38.9 | 39.7 | 79              | 122   | 163   |
|                                    | Ambulatory care setting                | 28.2 | 38.6 | 43.0 | 259             | 225   | 213   |
|                                    | Other                                  | 33.7 | 41.7 | 44.0 | 161             | 236   | 335   |
| Clinical Area                      | Medical/surgical                       | 30.5 | 40.9 | 44.0 | 740             | 644   | 596   |
|                                    | Geriatrics                             | 26.6 | 36.5 | 40.5 | 122             | 135   | 233   |
|                                    | Pediatrics                             | 29.1 | 39.3 | 40.4 | 123             | 96    | 145   |
|                                    | Obstetrics/reproductive health         | 29.1 | 39.3 | 44.8 | 198             | 218   | 222   |
|                                    | Community/public health                | 30.6 | 40.9 | 42.9 | 166             | 166   | 87    |
|                                    | Psychiatric/mental health              | 33.3 | 43.5 | 46.4 | 125             | 99    | 91    |
|                                    | Perioperative anesthesia               | 34.9 | 46.9 | 47.5 | 137             | 156   | 195   |
|                                    | Emergency/trauma                       | 34.8 | 46.7 | 49.2 | 119             | 132   | 131   |
|                                    | Critical care                          | 34.2 | 45.5 | 48.5 | 345             | 346   | 394   |
|                                    | Other                                  | 32.9 | 43.1 | 42.5 | 93              | 124   | 192   |
| Years RN practice                  | Less than 5 years                      | 27.2 | 36.5 | 33.2 | 332             | 262   | 334   |
|                                    | 5-9 years                              | 29.9 | 41.7 | 43.7 | 449             | 392   | 378   |
|                                    | 10-14 years                            | 31.3 | 42.0 | 44.7 | 466             | 447   | 387   |
|                                    | 15-24 years                            | 33.9 | 44.1 | 47.8 | 547             | 625   | 784   |
|                                    | More than 24 years                     | 33.9 | 43.7 | 50.0 | 392             | 391   | 511   |

\* Nurse Anesthetist, Nurse Midwife, Nurse Practitioner, and Psychiatric/Mental Health Nurse

## CHAPTER 4. ATTITUDES TOWARD NURSING

### Changes in Attitudes Among Working Nurses

Using their most recent work experience as a reference point, respondents were asked to indicate their degree of satisfaction with five aspects of nursing employment: (1) salary and benefits; (2) work environment and schedule; (3) support and interpersonal relationships; (4) opportunities for advancement; (5) transitions and training. Respondents were more satisfied on all items in 1997 than they had been in 1990 -- particu-

larly with their starting salary, salary range and required non-nursing tasks (up 10 - 12% in average ratings over the 8 years). However, they were less satisfied in 1997 than in 1993 on four important job features: salary range, benefits, adequacy of staffing and job security (down 3 to 4% in average ratings over 5 years). (Table 4.1)

In 1997, respondents were most satisfied with interpersonal relationships and the level of support associated

Table 4.1. Evaluations of Nursing Work by Survey Year for Respondents Currently Employed in Nursing

| Respondents rated their level of satisfaction on a scale ranging from 1 (very dissatisfied) to 5 (very satisfied). | 1990 |      |       | 1993 |      |       | 1997 |      |       |
|--|------|------|-------|------|------|-------|------|------|-------|
|  | Mean | SD   | N     | Mean | SD   | N     | Mean | SD   | N     |
| 1. Your job overall  | 3.77 | .92  | 2,224 | 3.94 | .91  | 2,201 | 3.95 | .96  | 2,463 |
| 2. Your starting salary  | 3.04 | 1.10 | 2,206 | 3.42 | 1.05 | 2,162 | 3.39 | 1.08 | 2,436 |
| 3. The salary range for your position  | 2.91 | 1.15 | 2,215 | 3.34 | 1.10 | 2,180 | 3.19 | 1.67 | 2,445 |
| 4. Employee benefits   | 3.34 | 1.20 | 2,082 | 3.58 | 1.13 | 2,056 | 3.47 | 1.19 | 2,304 |
| 5. Skill of RNs where you work   | 3.88 | .91  | 2,163 | 3.94 | .90  | 2,145 | 3.96 | .94  | 2,408 |
| 6. Adequacy of RN staffing where you work  | 2.97 | 1.20 | 2,144 | 3.29 | 1.15 | 2,125 | 3.13 | 1.25 | 2,378 |
| 7. Adequacy of clerical support services   | 2.99 | 1.16 | 2,189 | 3.20 | 1.16 | 2,155 | 3.15 | 1.17 | 2,404 |
| 8. Non-nursing tasks required (housekeeping, lab, transportation)  | 2.78 | 1.12 | 2,052 | 3.05 | 1.07 | 1,993 | 3.09 | 1.04 | 2,180 |
| 9. Physical work environment   | 3.37 | 1.09 | 2,232 | 3.58 | 1.01 | 2,191 | 3.60 | 1.01 | 2,449 |
| 10. Work schedule  | ...  | ...  | ...   | ...  | ...  | ...   | 3.97 | .97  | 2,464 |
| 11. Support from other nurses you work with  | 3.92 | .96  | 2,172 | 4.00 | .94  | 2,170 | 4.01 | .97  | 2,407 |
| 12. Support from your nursing administration   | 2.96 | 1.19 | 2,093 | 3.00 | 1.18 | 2,075 | 3.06 | 1.27 | 2,326 |
| 13. Relations with physicians  | 3.65 | .97  | 2,204 | 3.70 | .91  | 2,150 | 3.86 | .89  | 2,416 |
| 14. Relations with other non-nursing staff   | 3.86 | .72  | 2,231 | 3.94 | .68  | 2,186 | 4.03 | .73  | 2,460 |
| 15. Interactions with patients   | ...  | ...  | ...   | ...  | ...  | ...   | 4.31 | .74  | 2,392 |
| 16. Opportunities for advancement  | 2.95 | 1.05 | 2,116 | 3.15 | 1.03 | 2,073 | 3.15 | 1.09 | 2,315 |
| 17. Involvement in policy and management decisions   | 2.90 | 1.11 | 2,160 | 3.08 | 1.11 | 2,132 | 3.06 | 1.17 | 2,347 |
| 18. Opportunities to use your skills   | 3.85 | .91  | 2,234 | 3.98 | .85  | 2,197 | 3.98 | .93  | 2,470 |
| 19. Opportunities to learn new skills  | 3.58 | 1.04 | 2,224 | 3.75 | 1.01 | 2,184 | 3.74 | 1.08 | 2,449 |
| 20. Job security   | ...  | ...  | ...   | 3.42 | 1.15 | 2,176 | 3.31 | 1.21 | 2,445 |
| 22. Transition from school to first RN job   | 3.61 | 1.10 | 2,189 | 3.70 | 1.07 | 2,148 | 3.84 | 1.06 | 2,418 |
| 23. Orientation to new RN jobs   | 3.52 | .99  | 2,200 | 3.58 | .99  | 2,144 | 3.68 | .98  | 2,424 |
| 24. Employer sponsored training programs   | 3.28 | 1.11 | 2,108 | 3.44 | 1.09 | 2,094 | 3.42 | 1.15 | 2,373 |

with their job. (Figure 4.3) In descending order, respondents were most satisfied with: interactions with patients (4.31 on a 5 point scale); relationships with non-nursing staff (4.03); support from other nurses (4.01); opportunities for using one's skills (3.98); work schedule (3.97); the skills of other RNs (3.96); and the job overall (3.95). Conversely, in ascending order, respondents were least satisfied with: the level of support from their nursing administration (3.06); their involvement in policy and management decisions (3.06); non-nursing tasks required of them (3.09); the adequacy of RN staffing (3.13) and clerical support services (3.15) where they work; opportunities for advancement (3.15); the salary range for their position (3.19); and job security (3.31). (Table 4.1 and Figures 4.1 and 4.2)

As Figures 4.1 to 4.5 indicate, areas of relative satisfaction and dissatisfaction have been consistent over time. Confidence in the skill of other RNs, support from other nurses, relationships with non-nursing staff, opportunities to use skills, and satisfaction with the transition from school to the first RN job and with the job overall have been relatively high in all three survey years (with means greater than 3.5). On the other hand, respondents have been relatively dissatisfied with support from nursing administration, opportunities for advancement, involvement in management decisions, and the non-nursing tasks required in all three survey years. The latter alone showed marked improvement over the 8 year period.

Figure 4.1 Overall Job Satisfaction and Satisfaction with Salary and Benefits by Survey Year

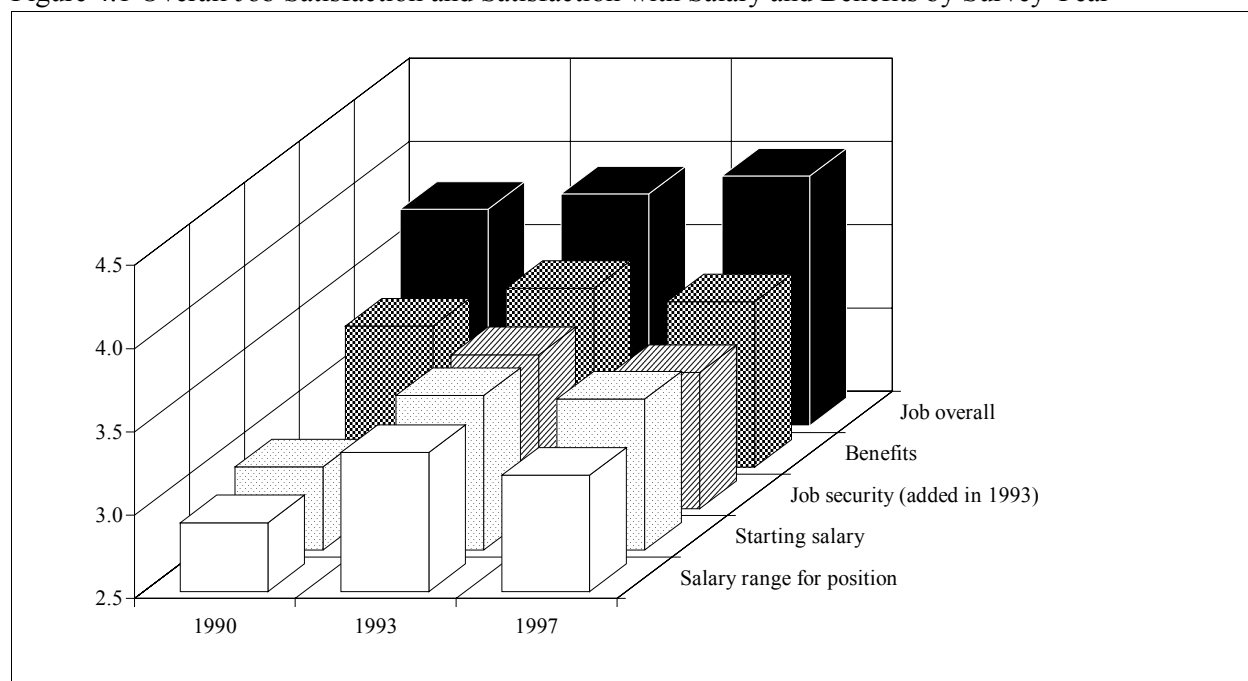


Figure 4.2 Satisfaction with Staffing, Work Environment and Work Schedule by Survey Year

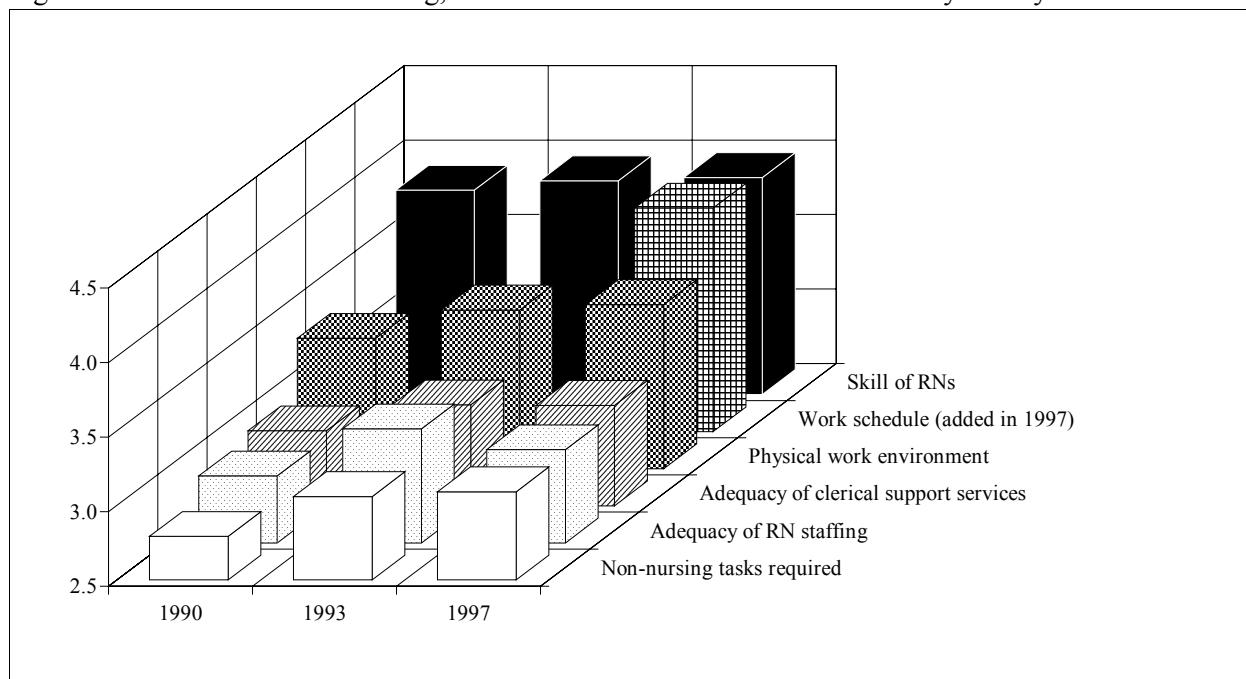


Figure 4.3 Satisfaction with Support and Interpersonal Relationships by Survey Year

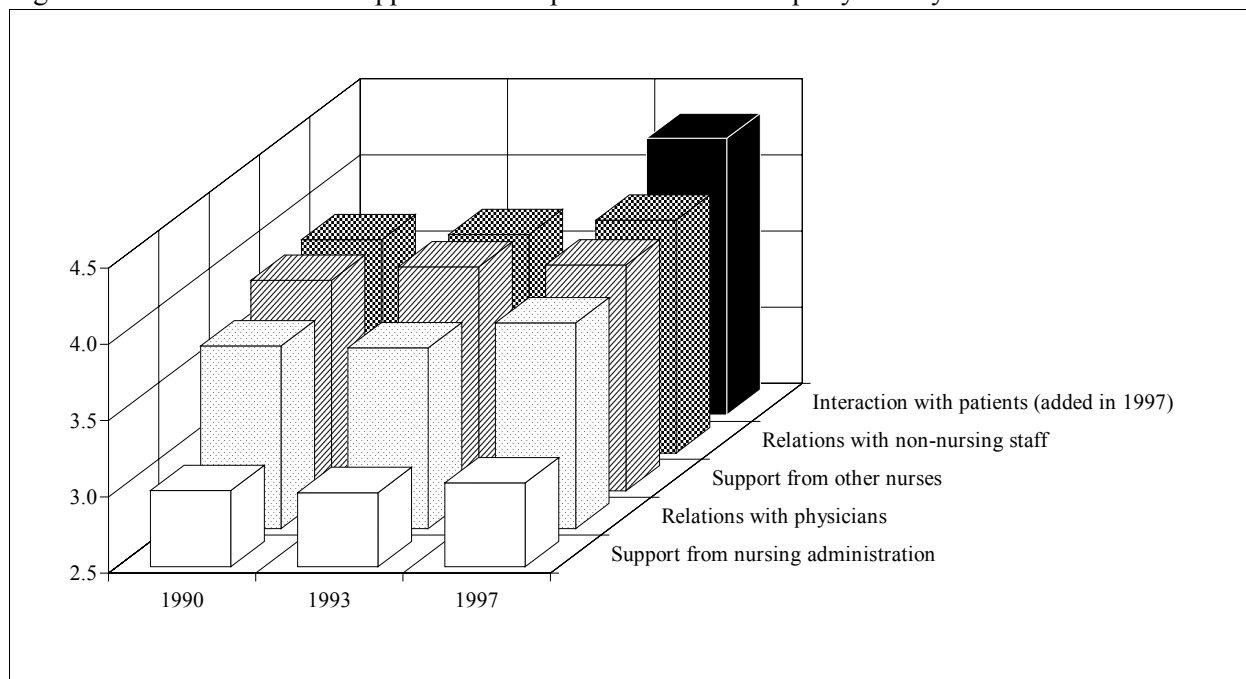


Figure 4.4 Satisfaction with Opportunities and Involvement by Survey Year

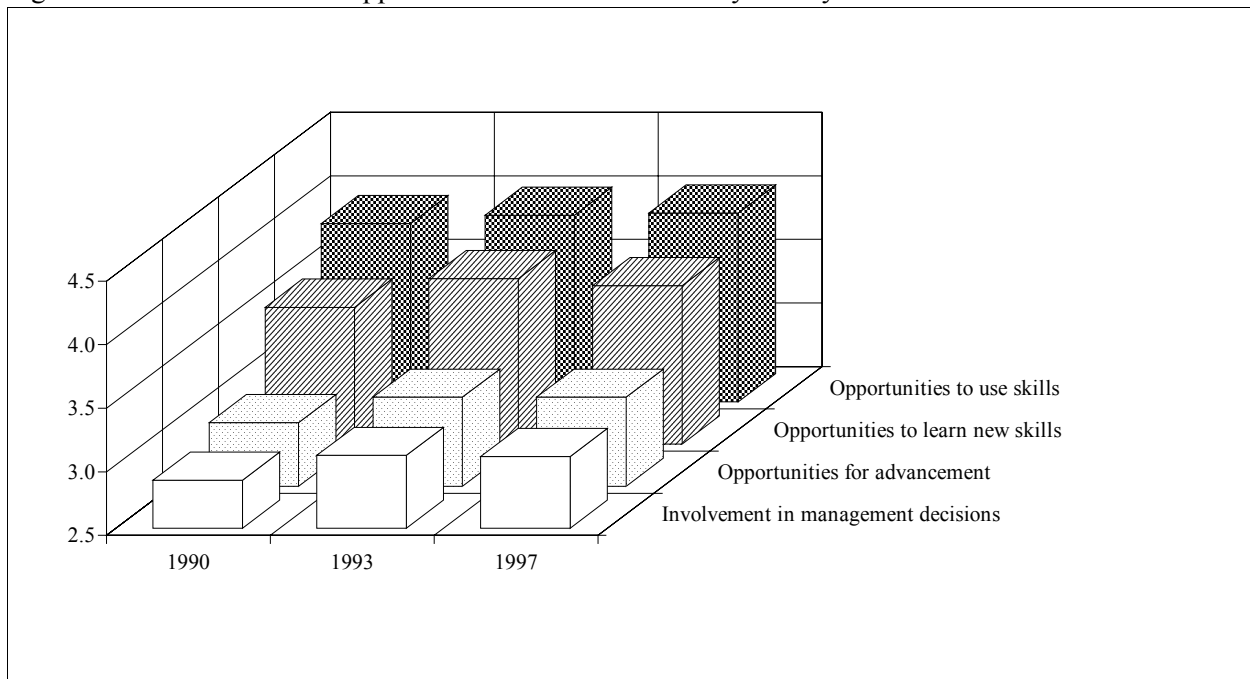
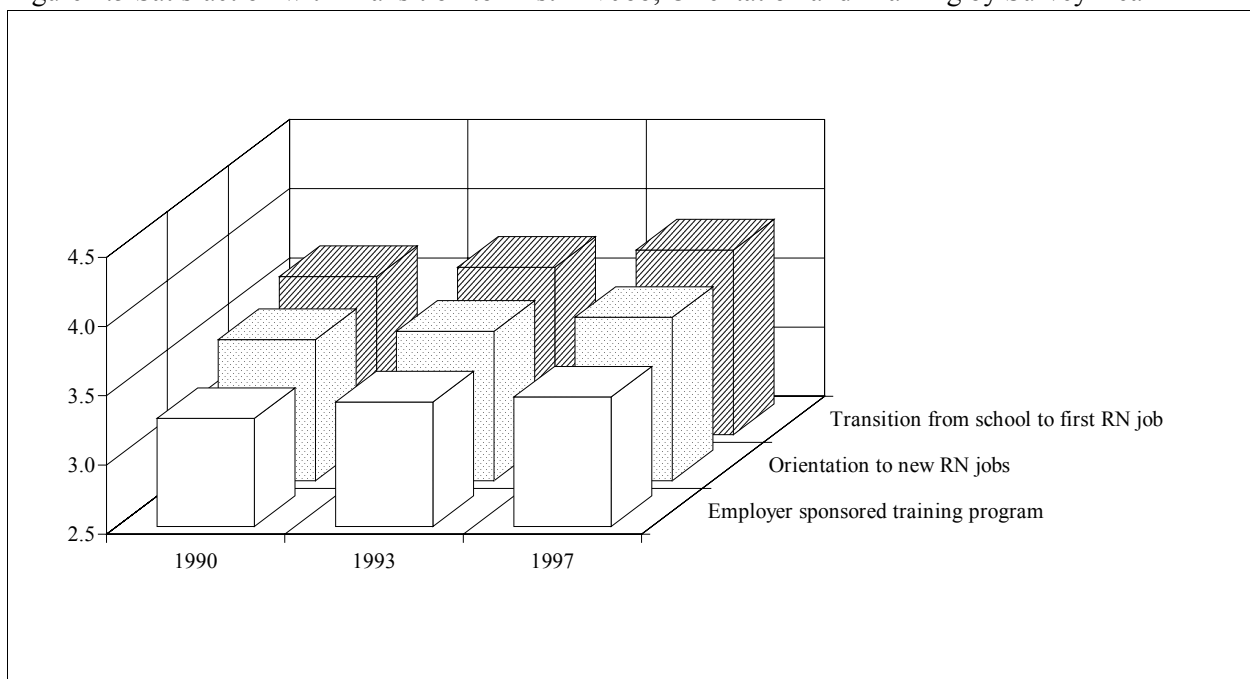


Figure 4.5 Satisfaction with Transition to First RN Job, Orientation and Training by Survey Year



## Comments

At the end of the survey form, respondents were

invited to include their thoughts and ideas about the profession of nursing in California. Together, BRN and ISR staff developed 18 categories which summarized the most frequent and important subjects addressed in these comments. Seventy-one percent of the comments fell into one or more of these categories. With one exception, most of the comments were negative. The exception involved comments about the respondents' overall level of satisfaction with nursing; almost as many made positive comments on this subject (12.9% vs 15.7% negative). (Table 4.2) Topics drawing negative comments from the largest number of respondents were consistent with the objective measures described above, including: increased workload and responsibility, inadequate staffing and patient/nurse ratio (24.8%); compensation, benefits and job security (22.6%); harmful changes in healthcare delivery system (20.3%); decreased quality of care (14.7%); and problems associated with increased use of unlicensed assistive personnel (10.2%).

Table 4.2 Percent Distribution for Comments with Negative and Positive Aspects (N=605)

|  | Negative % | Positive % |
|--|------------|------------|
| Overall level of satisfaction with nursing       | 15.7       | 12.9       |
| Compensation, benefits and job security          | 22.6       | 1.7        |
| Work schedule and hours                          | 4.5        | 1.8        |
| Relationships with other nurses                  | 9.6        | 1.3        |
| Relationships with administration and management | 8.9        | .3         |
| Relationships with other staff                   | 1.7        | .2         |
| Interaction with patients                        | 10.2       | 1.8        |
| Job advancement                                  | .8         | .8         |
| Career growth opportunities                      | 2.5        | 1.5        |

Table 4.3 Percent Distribution for Negative Comments (N=605)

|  | %    |
|--|------|
| Increased workload and responsibility, inadequate staffing and patient/nurse ratio | 24.8 |
| Harmful changes in healthcare delivery system                                      | 20.3 |
| Decreased quality of care  | 14.7 |
| Problems associated with increased use of unlicensed assistive personnel           | 10.2 |
| Spending too much time on non-nursing tasks  | 10.6 |
| Lack of professional unity and recognition   | 8.1  |
| Downsizing, cutbacks and layoffs   | 6.8  |
| Difficulties encountered as a newly licensed nurse                                 | 5.0  |
| Hazardous working conditions   | 1.7  |

### **Attitudes Evaluated by Features of the Work Setting<sup>1</sup>**

Respondents' attitudes towards nursing were affected by features of their work setting and to a lesser extent their educational background. Nurses employed in skilled nursing facilities were clearly the most dissatisfied group. This group of nurses was significantly more dissatisfied with benefits, job security, the skills of RNs where they work, the adequacy of clerical support, their work schedule, the physical work environment, support from other nurses and from nursing administration, relationships with non-nursing staff, and the job overall -- in that order. Although they do not differ significantly from other nurses in their dissatisfaction with the salary range for their position, they are less satisfied than those working in other organizations -- as would be expected, since they receive the lowest average salaries. (Table 3.4)

The second most dissatisfied group of nurses were those working for temporary agencies or registries. They were significantly more dissatisfied with their work schedule, job security, the adequacy of RN staffing where they work, their work environment, support from other nurses, the transition from school to their first RN job, the job overall and interactions with patients.

Two groups had differing attitudes about their work in nursing: respondents working in acute hospitals and those working in home nursing care. Nurses working in acute hospitals were most dissatisfied with job security, support from nursing administration, the adequacy of RN staffing and benefits than nurses employed in other organizations. On the other hand, they were more satisfied than nurses in other settings with opportunities to learn new skills, use existing ones, and advance in their profession. Respondents in home nursing care were among the most dissatisfied with benefits, job security and their work schedule. Conversely, they were quite positive about the adequacy of RN staffing, interac-

tions with patients, and the opportunity to learn new skills and advance in their profession.

The most satisfied groups of nurses were those in three specialties: obstetrics, geriatrics, and perioperative/anesthesia. Obstetric nurses were most satisfied with the job overall, the opportunity to use their nursing skills, support from other nurses, their work environment, work schedule and relationships with physicians and the non-nursing staff. Geriatric nurses especially appreciated their physical work environment, job security, clerical support, support from nursing administration, work schedule and starting salary. Perioperative/anesthesia nurses were more enthusiastic than nurses in other areas about the job overall, job security, their physical work environment, the limited number of non-nursing tasks required in their job, and their relationships with non-nursing staff.

Three other specialties were more satisfied than most on four features of nursing work. Pediatric nurses perceive more support from nursing administration, are more satisfied with the non-nursing tasks required, and are more satisfied with relationships with physicians and opportunities to use their nursing skills. Respondents working in emergency/trauma units were very positive about the opportunities to apply skills and learn new ones, about relationships with physicians and the non-nursing staff. Critical care nurses were quite satisfied with their job security, work environment, the adequacy of RN staffing, and the opportunity to use their skills.

Although advanced practice nurses were not distinguished from others in their attitudes towards many features of nursing employment, they were relatively much more positive regarding three aspects. They clearly appreciated the opportunity to use their nursing skills and learn new ones and they were more satisfied than most with the non-nursing tasks required.

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<sup>1</sup> This discussion is based on the results of a multiple regression analysis.

Nurses in management positions felt relatively more support from nursing administration, and felt more satisfied with their opportunities for advancement and their involvement in policy and management decisions -- although only the latter generated a strongly positive response.

Respondents were in remarkable agreement on some features of nursing employment. Other features sparked strong and sometimes divergent opinions among those in different positions or work settings. Respondents were uniformly positive about the transition from school to their first RN job and their orientation to new RN jobs. They were mildly positive about employer sponsored training programs, their starting salary and the salary range for their position.

They were generally positive about the benefits associated with their job, although three groups dissented strongly -- specifically, nurses working in skilled nursing facilities, home nursing care and acute hospitals. They were also quite positive about the skills of RNs they work with -- with the exception of those in skilled nursing facilities. Patient interactions gave them the most satisfaction of all with only temporary agency nurses noticeably less enthusiastic with this aspect of their job. With the exception of those in management positions, nurses were least satisfied with their involvement in policy and management decisions.

Other areas of general agreement include more satisfaction with relationships with physicians and support from other nurses (with those in skilled nursing facilities and temporary agencies less positive than most). While most respondents were not enthusiastic about opportunities for advancement, those in management positions, home nursing care and acute hospitals were somewhat more so.

Divergent feelings were most apt to occur in opinions about the work environment and job security. While respondents working in critical care, perioperative/anesthesia and obstetrics were more positive about this feature, respondents working in skilled nursing facilities and for temporary agencies were noticeably less satisfied. Similarly, nurses in these same specialty areas (obstetrics excepted)

were somewhat more positive about their job security. Nurses in skilled nursing facilities, acute hospitals, home nursing care, ambulatory care settings and temporary agencies were less satisfied with their job security.

There were some differences of opinion about work schedule, the degree of support from nursing administration and relationships with non-nursing staff. Respondents in skilled nursing facilities, home nursing care and temporary agencies were less satisfied with their work schedules than those in other settings. Similarly, nurses in skilled nursing facilities and acute hospitals were more dissatisfied with the level of support from nursing administration. Nurses in skilled nursing facilities were also noticeably less satisfied with -- although still quite positive about -- relationships with non-nursing staff. In contrast, nurses in the clinical specialties of geriatrics, obstetrics, perioperative/anesthesia and emergency care were especially positive about these relationships.

Finally, there were a few features of nursing employment where there were no strong differences of opinion, but where some groups were simply much more satisfied than most respondents. Those who were significantly more enthusiastic about opportunities to use their nursing skills included advanced practice nurses, those employed in acute hospitals and those practicing in pediatrics, obstetrics, emergency and critical care. Respondents who were most satisfied with the opportunity to learn new skills included advanced practice and emergency room nurses as well as those working in acute hospitals and home nursing care. While most respondents were neutral on the non-nursing tasks required in their jobs, a few found them somewhat less objectionable (pediatrics, perioperative/anesthesia and advanced practice nurses).

### **Comparison of Attitudes for those Employed Inside and Outside Nursing**

Nurses employed outside nursing were very similar to those employed in the field in their attitudes towards nursing. In the six instances where they disagreed, those outside nursing were more satisfied on four features of nursing employment: they were more positive about job security, opportunities for learning new skills, the adequacy of clerical support services, and the non-nursing tasks required. Those employed within the field were more satisfied with their work schedule and relationships with physicians than those currently employed in other areas.

## CHAPTER 5. IMPLICATIONS FOR THE FUTURE WORK FORCE

### Nurses Per Capita in California and the Nation

In a 1996 national survey, it was found that California has the lowest ratio of nurses per 100,000 population of any state (566, compared with a national average of 798). Employed nurses per 100,000 population is highest in New England (1103), the West North Central region (936), and the Middle Atlantic (931). The rate is lowest in the Pacific states (621). Only Idaho (583), Nevada (580), and Oklahoma (581) are close to CA (566) in RNs per 100,000. Comparably urban states -- Pennsylvania (1019), New York (911), Illinois (863), Michigan (816), and Texas (629) -- have roughly 50% more nurses per capita than California.<sup>1</sup>

Within California in 1997, Los Angeles and the south central valley have the lowest rates of RNs (464 and 407). The highest rates are found in Napa/Sonoma (756), San Francisco and the East Bay (686), and San Jose (647). The rest of the state varies between 553 and 596 nurses per 100,000 population. (Figure 5.1 and Table 5.1)

### Age and Employment Status

The 1990s saw a marked improvement in employment opportunities for California's registered nurses. Since 1990, the proportion of non-retired respondents currently working in nursing has increased (from 83% to 89.6%) while the proportion working outside nursing has declined 25% (from 5.6% to 4.2%) and the proportion unemployed has been cut almost in half (from 11.4% to 6.2%). (Table 5.2) The change affected all age groups, but especially those 45 and over. The proportion unemployed dropped 40% for those between 45 and 59 years of age and it dropped 68% for those 60 and over.

With the exception of retirement, withdrawal from the nursing labor force was concentrated in two narrow age categories. Seventy percent of those not currently employed in nursing are mid-career individuals between 35 and 54 years of age. This group last worked in nursing when they were between 36 and 41 years of age. Thirty percent of those not currently employed in nursing dropped out of the nursing labor force in their early 50s (between 49

Figure 5.1 Employed Registered Nurse Population Per Capita in California by Region

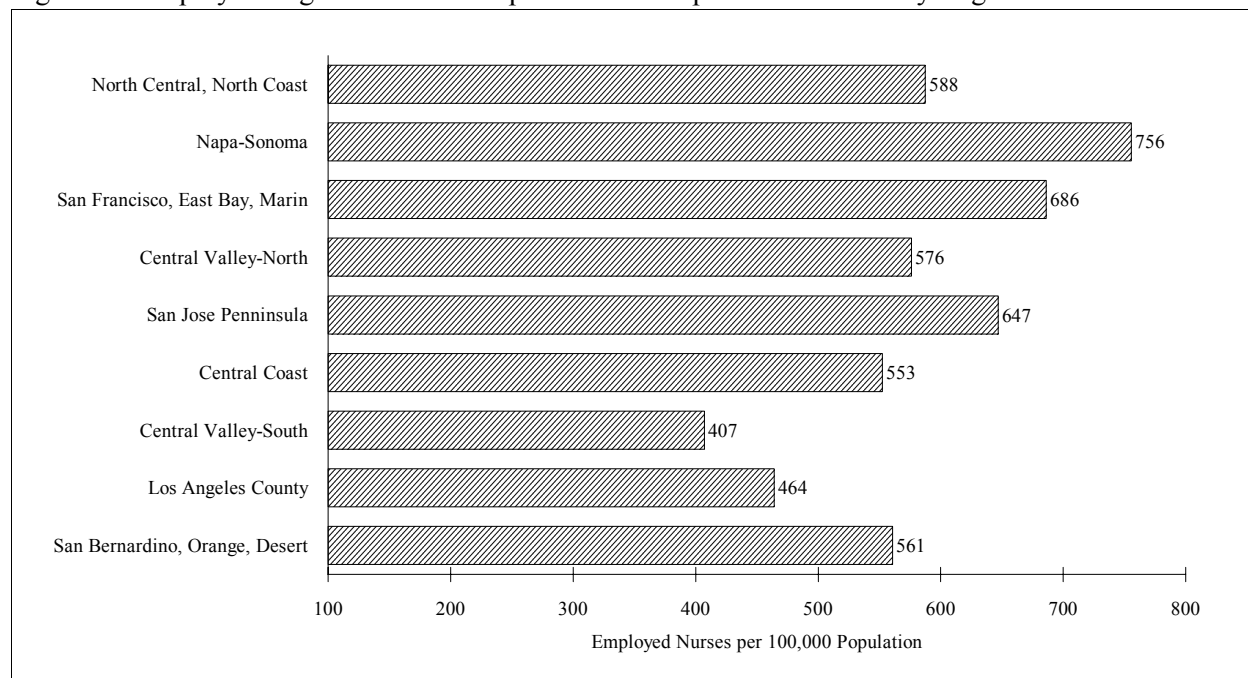


Table 5.1 Employed Registered Nurse Population Per Capita in California by Region

| Region                         | 1997 Sample |          | Estimated Number of Active-Status RN Licensees* | Percent of Respondents Employed as RN in 1997 | Estimated Number of Active-Status Licensees Employed as RN in 1997 | Estimated Number of Employed RNs per 100,000 population** |
|--------------------------------|-------------|----------|---|---|--|---|
|                                | Number      | Percent  |   |   |  |   |
| North Central, North Coast     | 127         | 3.18%    | 6,876   | 83%   | 5,686  | 588   |
| Napa-Sonoma                    | 121         | 3.03%    | 6,551   | 80%   | 5,254  | 756   |
| San Francisco, East Bay, Marin | 534         | 13.35%   | 28,912  | 88%   | 25,356   | 686   |
| Central Valley-North           | 389         | 9.73%    | 21,062  | 81%   | 17,144   | 576   |
| San Jose Peninsula             | 393         | 9.83%    | 21,278  | 81%   | 17,320   | 647   |
| Central Coast                  | 210         | 5.25%    | 11,370  | 85%   | 9,619  | 553   |
| Central Valley-South           | 180         | 4.50%    | 9,746   | 84%   | 8,157  | 407   |
| Los Angeles County             | 940         | 23.50%   | 50,894  | 87%   | 44,227   | 464   |
| San Bernardino, Orange, Desert | 734         | 18.35%   | 39,741  | 82%   | 32,389   | 561   |
| San Diego, Imperial            | 372         | 9.30%    | 20,141  | 86%   | 17,321   | 596   |
| Total                          | 4,000       | 100.00 % | 216,571   | 84%   | 182,474  | 554   |

\* With California addresses.

\*\* Population data are based on State of California, Department of Finance, County Population Estimates for July 1 1997.

Table 5.2 Employment Status by Age and Survey Year for Non-Retired Respondents\*

| Survey Year | Employment status      | Age at time of survey |       |       |       |       |         | Total |
|-------------|------------------------|-----------------------|-------|-------|-------|-------|---------|-------|
|             |                        | Under 35              | 35-44 | 45-54 | 55-59 | 60-64 | Over 64 |       |
| 1990        | Work in nursing        | 95.1                  | 86.3  | 80.3  | 79.6  | 71.1  | 46.0    | 83.0  |
|             | Work outside nursing   | 1.2                   | 5.3   | 9.0   | 5.8   | 5.6   | 9.3     | 5.6   |
|             | Not currently employed | 3.7                   | 8.4   | 10.7  | 14.6  | 23.2  | 44.7    | 11.4  |
|             | Total                  | 100.0                 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0   | 100.0 |
|             | Number of cases        | 570                   | 957   | 599   | 260   | 142   | 150     | 2,713 |
| 1993        | Work in nursing        | 94.2                  | 90.9  | 91.0  | 83.7  | 81.7  | 69.3    | 89.7  |
|             | Work outside nursing   | 2.9                   | 4.2   | 5.2   | 5.7   | 6.3   | 8.0     | 4.7   |
|             | Not currently employed | 2.9                   | 4.9   | 3.8   | 10.5  | 11.9  | 22.7    | 5.7   |
|             | Total                  | 100.0                 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0   | 100.0 |
|             | Number of cases        | 446                   | 942   | 634   | 209   | 126   | 88      | 2,467 |
| 1997        | Work in nursing        | 94.0                  | 90.2  | 88.8  | 85.4  | 85.7  | 80.4    | 89.6  |
|             | Work outside nursing   | 2.2                   | 4.2   | 4.8   | 5.7   | 5.0   | 3.6     | 4.2   |
|             | Not currently employed | 3.7                   | 5.6   | 6.4   | 8.9   | 9.3   | 16.1    | 6.2   |
|             | Total                  | 100.0                 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0   | 100.0 |
|             | Number of cases        | 401                   | 946   | 953   | 246   | 140   | 56      | 2,779 |

\* Although 1990 and 1993 respondents were not asked whether or not they were retired, respondents whose open-ended comments indicated that they were retired were removed from the sample. The 1997 survey included a specific question regarding retirement status. Unless otherwise noted, 1997 retired respondents have been excluded to allow for comparison across survey years.

and 53). Among respondents who retired directly from nursing employment, the mean retirement age was 62. (Table 5.3)

Reasons for leaving nursing vary depending on the age of the nurse. Younger nurses, particularly those under 35,

are more apt to leave nursing for personal reasons, while older nurses (60 and over) are retiring. Personal and job-related reasons are roughly equal for those in the middle age groups (45 to 59). Lay-offs are most common among nurses 45 and over (varying from 6.8 to 8.9% of those 45 to 64). (Table 5.4)

Table 5.3 Mean Age Last Worked as Registered Nurse by Current Age for Respondents Not Currently Employed in Nursing

|                                      | Current age at time of survey |       |       |       |       |         | Total |
|--------------------------------------|-------------------------------|-------|-------|-------|-------|---------|-------|
|                                      | Under 35                      | 35-44 | 45-54 | 55-59 | 60-64 | Over 64 |       |
| Non-retired respondents              | 28.1                          | 35.5  | 41.0  | 49.2  | 53.2  | 51.9    | 41.3  |
| <i>Number of cases</i>               | 19                            | 87    | 104   | 35    | 19    | 8       | 951   |
| Respondents who retired from nursing | ..                            | ..    | 35.5  | 55.8  | 59.4  | 64.5    | 62.0  |
| <i>Number of cases</i>               | ..                            | ..    | 2     | 5     | 25    | 59      | 91    |

Table 5.4 Reasons for Leaving Nursing by Age Last Worked as Registered Nurse for Respondents Not Currently Employed in Nursing\*

| Reason for leaving nursing | Age last worked as RN |       |       |       |       |         | Total |
|----------------------------|-----------------------|-------|-------|-------|-------|---------|-------|
|                            | Under 35              | 35-44 | 45-54 | 55-59 | 60-64 | Over 64 |       |
| Personal                   | 52.4                  | 45.5  | 38.6  | 30.4  | 16.9  | 17.5    | 37.1  |
| Job-related                | 38.1                  | 40.2  | 39.8  | 32.1  | 10.2  | 7.5     | 31.6  |
| Retired                    | 1.2                   | .9    | 8.4   | 28.6  | 66.1  | 72.5    | 21.4  |
| Laid off                   | 1.2                   | 3.6   | 7.2   | 8.9   | 6.8   | .0      | 4.6   |
| Other                      | 7.1                   | 9.8   | 6.0   | .0    | .0    | 2.5     | 5.3   |
| Total                      | 100.0                 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0   | 100.0 |
| <i>Number of cases</i>     | 84                    | 112   | 83    | 56    | 59    | 40      | 434   |

\* Includes retired respondents

Table 5.5 Intentions Regarding Work in Nursing by Age and Survey Year for Non-Retired Respondents Not Employed in Nursing

| Survey Year | Intentions regarding returning to nursing | Age at time of survey |       |       |       |       |         | Total |
|-------------|---|-----------------------|-------|-------|-------|-------|---------|-------|
|             |   | Under 35              | 35-44 | 45-54 | 55-59 | 60-64 | Over 64 |       |
| 1990        | Definitely will not return                | 17.9                  | 20.5  | 34.5  | 35.8  | 47.6  | 69.2    | 36.9  |
|             | May return                                | 71.4                  | 62.2  | 56.9  | 60.4  | 47.6  | 28.2    | 53.8  |
|             | Plan to return                            | 10.7                  | 17.3  | 8.6   | 3.8   | 4.8   | 2.6     | 9.2   |
|             | Total                                     | 100.0                 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0   | 100.0 |
|             | <i>Number of cases</i>                    | 28                    | 127   | 116   | 53    | 42    | 78      | 444   |
| 1993        | Definitely will not return                | 36.0                  | 27.3  | 21.8  | 32.4  | 50.0  | 51.9    | 32.3  |
|             | May return                                | 40.0                  | 52.3  | 58.2  | 61.8  | 45.5  | 48.1    | 52.6  |
|             | Plan to return                            | 24.0                  | 20.5  | 20.0  | 5.9   | 4.5   | .0      | 15.1  |
|             | Total                                     | 100.0                 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0   | 100.0 |
|             | <i>Number of cases</i>                    | 25                    | 88    | 55    | 34    | 22    | 27      | 251   |
| 1997        | Definitely will not return                | 4.2                   | 28.1  | 32.1  | 37.1  | 60.0  | 33.3    | 31.1  |
|             | May return                                | 33.3                  | 47.2  | 41.5  | 45.7  | 30.0  | 33.3    | 42.0  |
|             | Plan to return                            | 62.5                  | 24.7  | 26.5  | 17.1  | 10.0  | 33.3    | 26.9  |
|             | Total                                     | 100.0                 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0   | 100.0 |
|             | <i>Number of cases</i>                    | 24                    | 89    | 106   | 35    | 20    | 9       | 283   |

## Intentions

Nurses not currently working in nursing were asked about their intentions to return, while those currently employed in nursing were asked whether they anticipated leaving the field within the next five years. Between 1990 and 1997, the proportion of

those not currently working in nursing who planned to return tripled (from 9.2% in 1990 to 26.9% in 1997), while the proportion saying they definitely would not return declined (from 37% to 31%). An increased intent to return to nursing was greatest among those 45 to 59 and among the small number of respondents under 35. But, between 1990 and

Table 5.6 Percent of Currently Employed Nurses Intending to Leave Nursing Within the Next Five Years by Survey Year

|                         |  | Percent Intending to Leave Nursing |      |      | Number of cases |       |       |
|-------------------------|--|------------------------------------|------|------|-----------------|-------|-------|
|                         |  | 1990                               | 1993 | 1997 | 1990            | 1993  | 1997  |
| Overall                 |  | 14.6                               | 9.8  | 9.7  | 2,219           | 2,160 | 2,422 |
| Position                | Senior management, service setting     | 25.0                               | 5.3  | 9.3  | 88              | 75    | 108   |
|                         | Middle management, service setting     | 17.0                               | 11.5 | 10.5 | 276             | 313   | 267   |
|                         | Direct patient care provider           | 13.8                               | 9.8  | 9.3  | 1,373           | 1,271 | 1,446 |
|                         | Certified nurse specialist             | 14.1                               | 11.6 | 4.2  | 71              | 69    | 71    |
|                         | Nurse practitioner                     | 4.2                                | 2.5  | 5.5  | 48              | 40    | 73    |
|                         | School nurse                           | 15.6                               | 6.1  | 13.0 | 45              | 33    | 46    |
|                         | Public health nurse                    | 17.0                               | 10.4 | 8.8  | 47              | 48    | 34    |
|                         | Patient care coordinator/case manager  | 16.7                               | 13.3 | 13.7 | 60              | 98    | 131   |
|                         | Other                                  | 12.8                               | 7.1  | 10.3 | 187             | 198   | 156   |
| Position groups         | Management                             | 18.5                               | 10.4 | 10.2 | 378             | 393   | 381   |
|                         | Advanced practice                      | 3.0                                | 1.9  | 7.2  | 67              | 54    | 83    |
|                         | Direct Patient care                    | 13.8                               | 9.8  | 9.3  | 1,373           | 1,271 | 1,446 |
|                         | Other                                  | 15.4                               | 9.6  | 10.2 | 377             | 427   | 422   |
| Organi-<br>zation       | Acute hospital                         | 13.6                               | 9.5  | 8.8  | 1,482           | 1,365 | 1,435 |
|                         | Skilled nursing/extended care facility | 24.8                               | 17.1 | 11.5 | 121             | 105   | 165   |
|                         | Home nursing care                      | 8.4                                | 10.2 | 9.1  | 83              | 127   | 165   |
|                         | Ambulatory care setting                | 14.0                               | 7.8  | 6.9  | 258             | 231   | 216   |
|                         | Other                                  | 18.0                               | 9.9  | 13.5 | 239             | 293   | 408   |
| Clinical<br>Area        | Medical/surgical                       | 13.0                               | 7.8  | 11.1 | 752             | 663   | 602   |
|                         | Geriatrics                             | 23.0                               | 17.8 | 11.4 | 122             | 135   | 236   |
|                         | Pediatrics                             | 13.0                               | 8.2  | 7.7  | 123             | 98    | 142   |
|                         | Obstetrics/reproductive health         | 11.5                               | 8.3  | 8.0  | 209             | 218   | 224   |
|                         | Community/public health                | 17.8                               | 5.9  | 11.4 | 169             | 169   | 88    |
|                         | Psychiatric/mental health              | 21.7                               | 16.7 | 9.0  | 129             | 102   | 89    |
|                         | Perioperative anesthesia               | 16.1                               | 10.5 | 9.3  | 137             | 153   | 194   |
|                         | Emergency/trauma                       | 12.6                               | 12.8 | 10.4 | 119             | 133   | 134   |
|                         | Critical care                          | 12.1                               | 8.7  | 8.2  | 348             | 343   | 391   |
|                         | Other                                  | 21.3                               | 12.8 | 8.2  | 94              | 125   | 196   |
| Age                     | Under 35                               | 9.6                                | 7.1  | 4.0  | 532             | 411   | 371   |
|                         | 35-44                                  | 10.2                               | 5.4  | 4.7  | 814             | 835   | 825   |
|                         | 45-54                                  | 11.9                               | 8.3  | 9.2  | 478             | 564   | 824   |
|                         | 55-59                                  | 23.4                               | 18.2 | 18.0 | 205             | 170   | 206   |
|                         | 60-64                                  | 47.5                               | 37.0 | 37.6 | 101             | 100   | 117   |
|                         | Over 64                                | 51.6                               | 33.3 | 43.2 | 64              | 60    | 44    |
| Years<br>RN<br>practice | Less than 5 years                      | 7.7                                | 4.1  | 2.6  | 339             | 268   | 347   |
|                         | 5-9 years                              | 11.5                               | 7.1  | 5.4  | 453             | 396   | 373   |
|                         | 10-14 years                            | 9.5                                | 9.2  | 6.9  | 472             | 447   | 389   |
|                         | 15-24 years                            | 16.7                               | 8.0  | 7.6  | 552             | 635   | 785   |
|                         | More than 24 years                     | 27.0                               | 19.5 | 22.1 | 396             | 395   | 512   |

1997, there was no change in the proportion of those 45 - 59 who said they definitely would not return to nursing (roughly a third in each year). (Table 5.5)

The proportion of currently employed nurses intend-

ing to leave nursing within the next five years has decreased by a third since 1990. In 1990, almost one in seven nurses expected to leave nursing within the next five years; in 1997, that had decreased to one in ten. Age was the most significant variable

affecting this intention, the proportion increasing steadily with age. Virtually nothing in the nursing experience contributed significantly to this intention -- nurses working in different positions, organizations and clinical areas were similar in their plans to leave. Nurses working in an ambulatory care setting constituted the only exception. They were *less* likely than those in other organizational settings to plan on leaving nursing. (Table 5.6)

## Projections

Two approaches were used to estimate the number of active RN licenses in California in 2007, ten years after the most recent survey. The simplest approach assumes that the average number of new licenses issued annually in the preceding five years (10,708) is a reasonable estimate of the number that will be issued in succeeding years. It also assumes that the number of active licensees who fail to renew their licenses will remain constant. The

withdrawal rate was determined by subtracting the net gain between two years from the number of new active licenses in the later year. Thus, there was a net gain of 3,640 between the 1996/97 survey year, which had 238,414 active licenses and 1997/98, with 242,054. Subtracting 3,640 from the 11,335 new licenses in 1997/98 gives the number of non-renewed licenses (7695), which constitute 3.23% of 1996/97's 238,414 active licenses. Averaging the withdrawal rate over the preceding five years gives the most reasonable estimate of what that rate will be in succeeding years -- a rate of 3.46%.

The estimated number of active licenses in 2007 was then derived by starting with the actual number in 1997 (238,414), adding the average number of new licenses and subtracting the number of non-renewals in each year to arrive at annual estimates of the number of active licenses at the end of each year. Repeating this procedure for a ten-year period leads to an estimated 261,236 active licenses in 2007. This would overstate the number of active licenses if the drop rate increases -- which may occur as more currently active RNs reach retirement age. This estimate would also be affected by marked changes in the number of new licensees. (See Table 5.7)

Table 5.7 Projected Number of Active California RN Licenses, 1997-2007

| Year | Estimated Number of:                         |              |                |  |
|------|--|--------------|----------------|--|
|      | Active Licenses at the Beginning of the Year | Withdrawals* | New Licenses** | Active Licenses at the End of the Year |
| 1997 | 238,414                                      | 8,249        | 10,708         | 240,873                                |
| 1998 | 240,873                                      | 8,334        | 10,708         | 243,247                                |
| 1999 | 243,247                                      | 8,416        | 10,708         | 245,538                                |
| 2000 | 245,538                                      | 8,496        | 10,708         | 247,751                                |
| 2001 | 247,751                                      | 8,572        | 10,708         | 249,887                                |
| 2002 | 249,887                                      | 8,646        | 10,708         | 251,948                                |
| 2003 | 251,948                                      | 8,717        | 10,708         | 253,939                                |
| 2004 | 253,939                                      | 8,786        | 10,708         | 255,861                                |
| 2005 | 255,861                                      | 8,853        | 10,708         | 257,716                                |
| 2006 | 257,716                                      | 8,917        | 10,708         | 259,507                                |
| 2007 | 259,507                                      | 8,979        | 10,708         | 261,236                                |

\* 3.46% of active licenses, based on FY 1993/94 to 1997/98 Agency Statistical Profiles (ASP).

\*\* Five year average from ASP for FY 1993/94 to 1997/98.

The second approach used information gathered from survey respondents to refine these projections. This information included: 1) the proportion working and not working in nursing in 1997; 2) the intention to return to nursing among those currently not employed in nursing and the expectation among those currently employed that they would be out of the labor force in 2002; and 3) age at the time of the survey. Estimates for 2002 were based on the stated intentions of survey respondents in 1997. Estimates for 2007 were based on the proportionate distribution, by age group, of those in and out of the nursing labor force in 1997. It was assumed that the same proportion of nurses will leave the labor force in a given age category in 2007 as occurred in 1997. It was also assumed that new California licensees were distributed across the age categories in the same way as recently licensed respondents. (See Table 5.8)

Table 5.8 Projected Number of Active California RN Licenses in 2002 and 2007 by Age, Intentions Regarding Future Nursing Employment and Current Employment Status

|   |  |  | Under 35 | 35-44  | 45-54  | 55-59  | 60-64  | Over 64 | Total   |
|---|--|--|----------|--------|--------|--------|--------|---------|---------|
| Age distribution of 1997 active licensees |  |  | 32,901   | 77,723 | 78,677 | 21,457 | 15,735 | 11,921  | 238,414 |
| 2002<br>Projection                        | Age distribution of 1997 active licensees in 2002  |  | 12,927   | 51,463 | 92,862 | 32,072 | 21,436 | 27,654  | 238,414 |
|   | Intentions for Nursing Work<br>During Next Five Years  | Not doing RN work in 2002*   | 655      | 2,700  | 7,609  | 5,645  | 4,909  | 14,563  | 36,081  |
|   |  | Working in nursing in 2002   | 12,273   | 48,763 | 85,253 | 26,427 | 16,527 | 13,091  | 202,334 |
|   | New Licenses 1998-2002   | Age distribution of 1997 survey<br>respondents licensed in last five years | 51.0%    | 31.0%  | 15.0%  | 3.0%   | .0%    | .0%     | 100.0%  |
|   |  | Number of new RNs licensed 1998-2002                                       | 27,304   | 16,597 | 8,031  | 1,606  | 0      | 0       | 53,538  |
|   | Percent of 1997 survey respondents not currently employed in nursing                                 |  | 6.0%     | 10.2%  | 12.1%  | 19.8%  | 37.5%  | 69.2%   | 15.9%   |
|   | Estimated number of 2002 active licensees not employed in nursing                                    |  | 2,375    | 6,667  | 11,287 | 5,551  | 6,198  | 9,059   | 41,136  |
|   | Estimated number of 2002 active licensees employed in nursing  |  | 37,203   | 58,693 | 81,996 | 22,483 | 10,329 | 4,032   | 214,736 |
|   | Total estimated active licenses in 2002  |  | 39,577   | 65,360 | 93,284 | 28,033 | 16,527 | 13,091  | 255,872 |
| 2007<br>Projection                        | Age distribution of 2002 active licensees in 2007  |  | 3,152    | 55,402 | 88,593 | 48,937 | 28,238 | 31,549  | 255,871 |
|   | Percent of 1997 survey respondents intending<br>to work in nursing during the next five years**      |  | 94.9%    | 94.8%  | 91.8%  | 82.4%  | 77.1%  | 47.3%   | n/a     |
|   | Estimated number of 2002 active licensees intending<br>to work in nursing during the next five years |  | 2,991    | 52,521 | 81,328 | 40,324 | 21,771 | 14,923  | 213,859 |
|   | New licenses 2003-2007   |  | 27,304   | 16,597 | 8,031  | 1,606  | 0      | 0       | 53,538  |
|   | Percent of 1997 survey respondents not currently employed in nursing                                 |  | 6.0%     | 10.2%  | 12.1%  | 19.8%  | 37.5%  | 69.2%   | 15.9%   |
|   | Estimated number of 2007 active licensees not employed in nursing                                    |  | 1,818    | 7,050  | 10,812 | 8,302  | 8,164  | 10,326  | 46,473  |
|   | Estimated number of 2007 active licensees employed in nursing  |  | 28,478   | 62,068 | 78,547 | 33,628 | 13,607 | 4,596   | 220,924 |
|   | Total estimated active licenses in 2007  |  | 30,296   | 69,118 | 89,359 | 41,930 | 21,771 | 14,923  | 267,397 |

\* This category includes those employed in nursing in 1997 who intend to leave nursing within the next five years, as well as those not employed in nursing who indicated that they will not return to nursing. The estimate assumes that since this group does not plan to be in the nursing labor force in 2002, they will not maintain active RN licenses.

\*\* These percentages include those remaining in the labor force as well as re-entries. Applying these percentages has the effect of removing those not in the nursing labor force from the pool of active licensees.

Table 5.9 Age Distribution of Active California RN Licensees by Year\*

|          | Percentage Distribution<br>for Active Licensees |       |       | Number of<br>Active Licensees |         |         |
|----------|---|-------|-------|-------------------------------|---------|---------|
|          | 1997  | 2002  | 2007  | 1997                          | 2002    | 2007    |
| Under 35 | 13.8  | 15.5  | 11.3  | 32,901                        | 39,577  | 30,296  |
| 35-44    | 32.6  | 25.5  | 25.8  | 77,723                        | 65,360  | 69,118  |
| 45-54    | 33.0  | 36.5  | 33.4  | 78,677                        | 93,284  | 89,359  |
| 55-59    | 9.0   | 11.0  | 15.7  | 21,457                        | 28,033  | 41,930  |
| 60-64    | 6.6   | 6.5   | 8.1   | 15,735                        | 16,527  | 21,771  |
| 65+      | 5.0   | 5.1   | 5.6   | 11,921                        | 13,091  | 14,923  |
| Total    | 100.0   | 100.0 | 100.0 | 238,414                       | 255,872 | 267,397 |

\* Actual expanded age distribution for 1997, projected age distribution for 2002 and 2007.

The estimate produced by the second approach (267,397 active licensees in 2007) is greater than that generated by the first. The second probably overstates the case because active licensees not currently employed in nursing were only omitted if they indicated they "definitely would not return to nursing." A similar number, who indicated they "may return," were counted as returning. Undoubtedly, some portion of these will not; but there is no basis for choosing what proportion that will be.

Both approaches overstate the number of active licensees in the California labor force because a substantial number of licensees live in other states. In the survey year, 1996/97, out-of-state licensees made up 8.8% of the total number of active licenses in the state. Assuming this number is relatively constant from year to year, the effective labor force would be approximately 91.2% of the estimates. Using the first approach, the resident, effective labor force in 2007 is estimated to be 238,247 RNs, while under the second approach, the number would be 243,866.

With either approach, it is important to note that the real impact of the maturing RN population will probably not be felt until 2012, when the vanguard of the baby boom generation moves into retirement age. In 1997, almost half (47%) of active licensees were under 45; by 2007, little more than a third were this young (37%) and half (49%) were 45 to 59. By 2012, a third of this group (16%) will have matured into what may be the prime retirement category (60 - 64) -- so named because the mean, median and modal retirement age among retired respondents in 1997 was 62. This should increase the proportion of withdrawn licenses -- and the proportion not returning to nursing -- further reducing the net gain in active licensees unless significant increases occur in the number of new licensees. (See Table 5.9)

1. Employed nurses per 100,000 population is taken from *The Registered Nurse Population, March 1996: Findings from the National Sample Survey of Registered Nurses*, Health Resources and Services Administration, U.S. Department of Health and Human Services, pp. 70 - 71.

## Appendix A

Table A-1. Evaluations of Nursing Work by Survey Year for Respondents Currently Employed in Nursing

| Respondents rated their level of satisfaction on a scale ranging from 1 (very dissatisfied) to 5 (very satisfied). | 1990 |      |       | 1993 |      |       | 1997 |      |       |
|--|------|------|-------|------|------|-------|------|------|-------|
|  | Mean | SD   | N     | Mean | SD   | N     | Mean | SD   | N     |
| 1. Your job overall  | 3.77 | .92  | 2,224 | 3.94 | .91  | 2,201 | 3.95 | .96  | 2,463 |
| 2. Your starting salary  | 3.04 | 1.10 | 2,206 | 3.42 | 1.05 | 2,162 | 3.39 | 1.08 | 2,436 |
| 3. The salary range for your position  | 2.91 | 1.15 | 2,215 | 3.34 | 1.10 | 2,180 | 3.19 | 1.67 | 2,445 |
| 4. Employee benefits   | 3.34 | 1.20 | 2,082 | 3.58 | 1.13 | 2,056 | 3.47 | 1.19 | 2,304 |
| 5. Skill of RNs where you work   | 3.88 | .91  | 2,163 | 3.94 | .90  | 2,145 | 3.96 | .94  | 2,408 |
| 6. Adequacy of RN staffing where you work  | 2.97 | 1.20 | 2,144 | 3.29 | 1.15 | 2,125 | 3.13 | 1.25 | 2,378 |
| 7. Adequacy of clerical support services   | 2.99 | 1.16 | 2,189 | 3.20 | 1.16 | 2,155 | 3.15 | 1.17 | 2,404 |
| 8. Non-nursing tasks required (housekeeping, lab, transportation)  | 2.78 | 1.12 | 2,052 | 3.05 | 1.07 | 1,993 | 3.09 | 1.04 | 2,180 |
| 9. Physical work environment   | 3.37 | 1.09 | 2,232 | 3.58 | 1.01 | 2,191 | 3.60 | 1.01 | 2,449 |
| 10. Work schedule  | ...  | ...  | ...   | ...  | ...  | ...   | 3.97 | .97  | 2,464 |
| 11. Support from other nurses you work with  | 3.92 | .96  | 2,172 | 4.00 | .94  | 2,170 | 4.01 | .97  | 2,407 |
| 12. Support from your nursing administration   | 2.96 | 1.19 | 2,093 | 3.00 | 1.18 | 2,075 | 3.06 | 1.27 | 2,326 |
| 13. Relations with physicians  | 3.65 | .97  | 2,204 | 3.70 | .91  | 2,150 | 3.86 | .89  | 2,416 |
| 14. Relations with other non-nursing staff   | 3.86 | .72  | 2,231 | 3.94 | .68  | 2,186 | 4.03 | .73  | 2,460 |
| 15. Interactions with patients   | ...  | ...  | ...   | ...  | ...  | ...   | 4.31 | .74  | 2,392 |
| 16. Opportunities for advancement  | 2.95 | 1.05 | 2,116 | 3.15 | 1.03 | 2,073 | 3.15 | 1.09 | 2,315 |
| 17. Involvement in policy and management decisions   | 2.90 | 1.11 | 2,160 | 3.08 | 1.11 | 2,132 | 3.06 | 1.17 | 2,347 |
| 18. Opportunities to use your skills   | 3.85 | .91  | 2,234 | 3.98 | .85  | 2,197 | 3.98 | .93  | 2,470 |
| 19. Opportunities to learn new skills  | 3.58 | 1.04 | 2,224 | 3.75 | 1.01 | 2,184 | 3.74 | 1.08 | 2,449 |
| 20. Job security   | ...  | ...  | ...   | 3.42 | 1.15 | 2,176 | 3.31 | 1.21 | 2,445 |
| 22. Transition from school to first RN job   | 3.61 | 1.10 | 2,189 | 3.70 | 1.07 | 2,148 | 3.84 | 1.06 | 2,418 |
| 23. Orientation to new RN jobs   | 3.52 | .99  | 2,200 | 3.58 | .99  | 2,144 | 3.68 | .98  | 2,424 |
| 24. Employer sponsored training programs   | 3.28 | 1.11 | 2,108 | 3.44 | 1.09 | 2,094 | 3.42 | 1.15 | 2,373 |

ISR would like to thank the Survey Research Center at CSU Chico for their generous cooperation and assistance in providing the data for the first two survey years. In this table, as well as others throughout this report, there are minor differences between the 1990 and 1993 data files, which ISR obtained from the Survey Research Center at CSU Chico, and the information presented in the reports for these years. These differences are usually due to the criteria for including subsets of cases in the analysis.

When the number of cases approximates 2200, and with a 95% confidence interval, mean values for the comparable registered nurse population will vary  $\pm .046$  around the values shown in this table. Unlike percentages, the intervals for means cannot be generalized to interval widths for means in other tables because the widths are also influenced by the standard deviations involved.

Table A-2. Employment in Nursing by Survey Year

|   |   | 1990  | 1993  | 1997  |
|---|---|-------|-------|-------|
|   |   | %     | %     | %     |
| I. Are you currently employed in nursing?<br>You should answer yes if you are<br>now working in nursing, even if<br>it is only part-time or if you<br>also have a non-nursing job. <sup>1</sup> | Yes   | 82.6  | 89.3  | 84.2  |
|   | No  | 17.4  | 10.7  | 15.8  |
|   | Total   | 100.0 | 100.0 | 100.0 |
|   | <i>Number of cases</i>  | 2,724 | 2,476 | 2,955 |
| 26. How many hours a <i>week</i> do you<br>usually work as a registered nurse?  | 8 hours or less   | 2.4   | 2.5   | 2.0   |
|   | 9-16 hours  | 5.3   | 4.8   | 4.0   |
|   | 17-24 hours   | 13.3  | 11.6  | 10.4  |
|   | 25-32 hours   | 15.4  | 14.3  | 14.6  |
|   | 33-40 hours   | 42.7  | 47.4  | 50.5  |
|   | 41-48 hours   | 10.5  | 8.5   | 9.9   |
|   | More than 48 hours  | 10.4  | 10.9  | 8.7   |
|   | Total   | 100.0 | 100.0 | 100.0 |
|   |   | 36.1  | 36.3  | 36.3  |
|   |   | 12.9  | 12.3  | 11.0  |
|   | <i>Number of cases</i>  | 2,251 | 2,212 | 2,470 |
|   | Hours worked per <i>week</i> in primary nursing<br>position (from item 30, the position in<br>which respondents spend the greatest<br>amount of time) |       |       |       |
|   | 8 hours or less   | 2.8   | 3.1   | 2.8   |
| 27. How many hours a <i>day</i> do you<br>usually work as a registered nurse?   | 9-16 hours  | 7.3   | 5.9   | 4.8   |
|   | 17-24 hours   | 15.8  | 14.4  | 12.8  |
|   | 25-32 hours   | 16.1  | 16.2  | 14.9  |
|   | 33-40 hours   | 44.2  | 49.5  | 51.3  |
|   | 41-48 hours   | 7.5   | 5.0   | 7.7   |
|   | More than 48 hours  | 6.4   | 5.8   | 5.6   |
|   | Total   | 100.0 | 100.0 | 100.0 |
|   |   | 34.0  | 33.9  | 34.6  |
|   |   | 12.5  | 11.5  | 10.7  |
|   | <i>Number of cases</i>  | 2,232 | 2,201 | 2,430 |
|   | 4 hours or less   | ...   | ...   | 2.5   |
|   | 5-7 hours   | ...   | ...   | 6.8   |
|   | 8 hours   | ...   | ...   | 45.0  |
|   | 9-11 hours  | ...   | ...   | 18.6  |
|   | 12 hours  | ...   | ...   | 24.4  |
|   | More than 12 hours  | ...   | ...   | 2.6   |
|   | Total   | ...   | ...   | 100.0 |
|   |   | ...   | ...   | 9.1   |
|   |   | ...   | ...   | 2.3   |
|   | <i>25. Number of cases</i>  | ...   | ...   | 2,433 |

<sup>1</sup> This question was not asked in 1990 and 1993. The information shown here for these years was inferred from responses to other questions. All remaining information presented in this table excludes respondents not currently employed in nursing.

Table A-2. Employment in Nursing by Survey Year

|  |                              | 1990  | 1993  | 1997  |
|--|------------------------------|-------|-------|-------|
|  |                              | %     | %     | %     |
| 28. How many hours per week do you usually remain and work overtime as a registered nurse without any advance notice? <sup>2</sup>   | None or less than 30 minutes | ...   | ...   | 36.6  |
|  | 1-2 hours                    | ...   | ...   | 31.3  |
|  | 3-4 hours                    | ...   | ...   | 15.1  |
|  | 5-6 hours                    | ...   | ...   | 6.7   |
|  | 7-8 hours                    | ...   | ...   | 4.0   |
|  | More than 8 hours            | ...   | ...   | 6.4   |
|  | Total                        | ...   | ...   | 100.0 |
|  |                              | ...   | ...   | 2.5   |
|  |                              | ...   | ...   | 4.1   |
|  | <i>Number of cases</i>       | ...   | ...   | 2,309 |
| 29. Do you currently hold more than one nursing position? "Position" refers to more than one employer, job title, or classification. | No                           | 80.8  | 79.6  | 76.4  |
|  | Yes                          | 19.2  | 20.4  | 23.6  |
|  | Total                        | 100.0 | 100.0 | 100.0 |
|  | <i>Number of cases</i>       | 2,222 | 2,201 | 2,431 |
|  | Two                          | 83.7  | 88.4  | 83.4  |
|  | Three                        | 13.9  | 10.3  | 14.7  |
|  | Four to six                  | 2.4   | 1.3   | 1.9   |
|  | Total                        | 100.0 | 100.0 | 100.0 |
|  | <i>Number of cases</i>       | 424   | 447   | 518   |
|  |                              |       |       |       |
| If yes, please write in the number of nursing positions.   | Two                          | 83.7  | 88.4  | 83.4  |
|  | Three                        | 13.9  | 10.3  | 14.7  |
|  | Four to six                  | 2.4   | 1.3   | 1.9   |
|  | Total                        | 100.0 | 100.0 | 100.0 |
|  | <i>Number of cases</i>       | 424   | 447   | 518   |
|  |                              |       |       |       |
|  | One                          | 80.9  | 79.7  | 78.2  |
|  | Two                          | 16.0  | 18.0  | 18.2  |
|  | Three                        | 2.7   | 2.1   | 3.2   |
|  | Four to six                  | .5    | .3    | .4    |
| Number of nursing positions (computed from above items)  | Total                        | 100.0 | 100.0 | 100.0 |
|  | <i>Number of cases</i>       | 2,219 | 2,198 | 2,376 |
|  |                              |       |       |       |
|  | None                         | 91.5  | 92.5  | 91.4  |
|  | One                          | 8.1   | 6.8   | 8.0   |
|  | Two to three                 | .4    | .7    | .6    |
|  | Total                        | 100.0 | 100.0 | 100.0 |
|  | <i>Number of cases</i>       | 2,251 | 2,212 | 2,489 |
|  |                              |       |       |       |
|  | 8 hours or less              | 76.8  | 38.5  | 38.3  |
| 30. Number of non-nursing positions (computed)   | 9-16 hours                   | 9.2   | 26.1  | 23.0  |
|  | 17-24 hours                  | 2.1   | 13.0  | 12.0  |
|  | 25-32 hours                  | 3.5   | 13.0  | 7.2   |
|  | 33-40 hours                  | 6.3   | 6.2   | 13.9  |
|  | 41-48 hours                  | 1.4   | 1.9   | 2.4   |
|  | More than 48 hours           | .7    | 1.2   | 3.3   |
|  | Total                        | 100.0 | 100.0 | 100.0 |
|  |                              | 7.8   | 15.8  | 18.1  |
|  |                              | 11.9  | 13.2  | 15.5  |
|  | <i>Number of cases</i>       | 142   | 161   | 209   |
| Number of hours worked per week in non-nursing positions (computed)  | 8 hours or less              | 76.8  | 38.5  | 38.3  |
|  | 9-16 hours                   | 9.2   | 26.1  | 23.0  |
|  | 17-24 hours                  | 2.1   | 13.0  | 12.0  |
|  | 25-32 hours                  | 3.5   | 13.0  | 7.2   |
|  | 33-40 hours                  | 6.3   | 6.2   | 13.9  |
|  | 41-48 hours                  | 1.4   | 1.9   | 2.4   |
|  | More than 48 hours           | .7    | 1.2   | 3.3   |
|  | Total                        | 100.0 | 100.0 | 100.0 |
|  |                              | 7.8   | 15.8  | 18.1  |
|  |                              | 11.9  | 13.2  | 15.5  |
|  | <i>Number of cases</i>       | 142   | 161   | 209   |

<sup>2</sup> Caution should be used in interpreting responses to this item. Respondents were asked to write-in their weekly unscheduled overtime hours. When respondents left the question blank, it is impossible to tell whether they: a) skipped the question; or b) do not work unscheduled overtime and therefore felt the question was not applicable to them. We know that the latter was the case for some respondents because they noted that they are salaried or exempt employees and said the question did not apply to them. Since this problem was not discovered until after the data entry phase, cases where the item was left blank have been treated as missing. Only respondents who actually wrote in "0" are counted as not working any unscheduled overtime. This produces a higher non-response rate for Question 28 (7.2%) than for Questions 26 and 27 (.8% and 2.2% respectively).

Table A-2. Employment in Nursing by Survey Year

|  |                                       | 1990                   | 1993         | 1997         |
|--|---------------------------------------|------------------------|--------------|--------------|
|  |                                       | %                      | %            | %            |
| Percent of working hours spent on nursing position(s) for respondents who also hold non-nursing positions (computed)   | Less than 50%                         | 10.6                   | 20.5         | 11.1         |
|  | 50% to 75%                            | 14.1                   | 38.5         | 45.9         |
|  | More than 75%                         | 75.4                   | 41.0         | 43.0         |
|  | Total                                 | 100.0                  | 100.0        | 100.0        |
|  |                                       | 80.4                   | 65.0         | 67.4         |
|  |                                       | 23.5                   | 22.8         | 20.9         |
|  |                                       | <i>Number of cases</i> | <i>142</i>   | <i>161</i>   |
| 31. How long have you been employed in the nursing position which currently requires the greatest number of hours per week or month?   | Less than 5 years                     | 49.4                   | 50.4         | 40.8         |
|  | 5-9 years                             | 22.1                   | 24.1         | 24.8         |
|  | 10-14 years                           | 14.4                   | 14.1         | 13.9         |
|  | More than 14 years                    | 14.1                   | 11.3         | 20.5         |
|  | Total                                 | 100.0                  | 100.0        | 100.0        |
|  |                                       | 7.0                    | 6.5          | 8.2          |
|  |                                       | 7.1                    | 6.2          | 7.7          |
|  |                                       | <i>Number of cases</i> | <i>2,222</i> | <i>2,168</i> |
| 32. If you listed in question 30 any positions that do not require that you be a licensed RN, please check the statement which best describes the nature of that employment. | Did not indicate that any positions   | 92.2                   | 93.2         | 92.2         |
|  | The job is related to health care and | 2.7                    | 2.5          | 4.1          |
|  | The job is related to health care and | 1.4                    | .7           | .7           |
|  | The job is unrelated to health care   | 3.7                    | 3.6          | 3.1          |
|  | Total                                 | 100.0                  | 100.0        | 100.0        |
|  |                                       | <i>Number of cases</i> | <i>2,251</i> | <i>2,212</i> |
| 33. Have any of your nursing employers changed your time base within the last 12 months?   | No, no change to time base            | ...                    | ...          | 73.0         |
|  | Yes, laid off                         | ...                    | ...          | 1.7          |
|  | Yes, reduced hours worked             | ...                    | ...          | 7.9          |
|  | Yes, increased hours worked           | ...                    | ...          | 7.4          |
|  | Yes, other                            | ...                    | ...          | 10.2         |
|  |                                       | ...                    | ...          | 100.0        |
|  |                                       | <i>Number of cases</i> | <i>...</i>   | <i>2,420</i> |
| 34. Are you currently employed in any nursing position through a temporary agency/registry?  | No                                    | 94.8                   | 93.4         | 93.5         |
|  | Yes                                   | 5.2                    | 6.6          | 6.5          |
|  | Total                                 | 100.0                  | 100.0        | 100.0        |
|  |                                       | <i>Number of cases</i> | <i>2,224</i> | <i>2,198</i> |
| 35. Indicate the reasons you work for a temporary agency/registry. Check all that apply.   | Wages                                 | 75.0                   | 68.5         | 59.4         |
|  | Benefits                              | 4.3                    | 2.1          | 4.4          |
|  | Control of schedule                   | 85.3                   | 68.5         | 56.9         |
|  | Control of work location              | 58.6                   | 32.2         | 30.6         |
|  | Waiting for a desirable               | 6.0                    | 14.4         | 19.4         |
|  | Other <sup>3</sup>                    | 24.1                   | 17.8         | 21.9         |
|  |                                       | <i>Number of cases</i> | <i>116</i>   | <i>146</i>   |

<sup>3</sup> Sub-categories for 1997 include: supplemental income (6.9%); maintain skills/get experience (3.8%); and better working conditions (2.5%).

Table A-2. Employment in Nursing by Survey Year

|   |  | 1990  | 1993  | 1997  |
|---|--|-------|-------|-------|
|   |  | %     | %     | %     |
| 36. Check the category which best describes the nursing position in which you spend the greatest number of hours per week or month. This is the same job identified in question 31.   | Senior management, service setting         | 4.0   | 3.5   | 4.6   |
|   | Middle management, service setting         | 12.5  | 14.5  | 11.4  |
|   | Direct patient care provider               | 62.6  | 59.5  | 62.1  |
|   | Clinical nurse specialist                  | 3.2   | 3.2   | 3.1   |
|   | Certified registered nurse anesthetist     | .5    | .5    | .3    |
|   | Certified nurse midwife                    | .4    | .2    | .1    |
|   | Nurse practitioner                         | 2.2   | 1.8   | 3.2   |
|   | Educator, service setting                  | 1.7   | 2.0   | .9    |
|   | Management/administrator, academic setting | .7    | .2    | .3    |
|   | Educator, academic setting                 | 1.2   | 1.3   | 1.0   |
|   | School nurse                               | 2.0   | 1.6   | 2.0   |
|   | Public health nurse                        | 2.2   | 2.2   | 1.5   |
|   | Patient care coordinator/case manager      | 2.7   | 4.5   | 5.6   |
|   | Consultant                                 | .8    | .9    | 1.1   |
|   | Researcher                                 | .2    | .8    | .4    |
|   | Other <sup>4</sup>                         | 3.1   | 3.3   | 2.6   |
|   | Total                                      | 100.0 | 100.0 | 100.0 |
| <i>Number of cases</i>  |  | 2,227 | 2,190 | 2,375 |
| 37. Approximately what percentage of your time is spent on each of the following functions during a typical week? This refers to the same job identified in question 31. (Means rather than percentages are shown for this panel of the table) <sup>5</sup> | Administration/management                  | ...   | ...   | 12.7  |
|   | Direct client care                         | ...   | ...   | 65.4  |
|   | Indirect client care (e.g.,                | ...   | ...   | 17.5  |
|   | Education of students                      | ...   | ...   | 3.0   |
|   | Other                                      | ...   | ...   | 1.4   |
|   | <i>Number of cases</i>                     | ...   | ...   | 2,422 |

<sup>4</sup> For the 1997 survey, 17 respondents (.7%) who wrote in position titles such as quality assurance, quality improvement, utilization review, utilization management and risk management were included in the "other" category.

<sup>5</sup> Functions that respondents included in the "other" category were reviewed and sometimes re-categorized. For example, when respondents put time spent charting under other, this time was moved to direct client care, in accordance with questionnaire instructions. Duties such as clerical, cleaning, stocking, housekeeping, driving, equipment maintenance and set-up, dealing with visitors, and patient phone calls -- which were described under other by 90 respondents -- were moved to indirect client care. When the description of time spent on other functions included multiple tasks belonging in different categories, responses were not edited.

Table A-2. Employment in Nursing by Survey Year

|  |  | 1990  | 1993  | 1997  |
|--|--|-------|-------|-------|
|  |  | %     | %     | %     |
| 38. Check the category which best describes the type of organization in which you work at the job identified in question 31. If you work through a temporary agency or registry, please check the type of organization where you most frequently staff. <sup>6</sup> | Acute hospital                         | 67.9  | 64.3  | 60.2  |
|  | Skilled nursing/extended care facility | 5.6   | 5.1   | 7.1   |
|  | Academic nursing program               | 1.3   | 1.5   | .8    |
|  | Public health/community health program | 3.4   | 2.5   | 2.7   |
|  | Home nursing care                      | 3.8   | 5.9   | 6.8   |
|  | Ambulatory care setting                | 11.8  | 10.9  | 9.0   |
|  | Occupational health/employee health    | 1.5   | .8    | .7    |
|  | Student health service                 | 2.1   | 1.6   | 1.5   |
|  | Mental health/drug, alcohol treatment  | ...   | 2.9   | 1.8   |
|  | Insurance organization                 | ...   | .0    | 1.6   |
|  | Self employed                          | 1.1   | .7    | .5    |
|  | Other                                  | 1.5   | 3.8   | 7.3   |
|  | Total                                  | 100.0 | 100.0 | 100.0 |
|  | <i>Number of cases</i>                 | 2,212 | 2,164 | 2,444 |
| 39. Check the one category which best describes the clinical area in which you most frequently practice. <sup>7</sup>  | Medical/surgical                       | 34.0  | 31.0  | 26.3  |
|  | Geriatrics                             | 5.6   | 6.5   | 10.3  |
|  | Pediatrics                             | 5.6   | 4.5   | 6.3   |
|  | Obstetrics/reproductive health         | 9.4   | 10.1  | 9.7   |
|  | Community/public health                | 7.7   | 7.9   | 3.7   |
|  | Psychiatric/mental health              | 5.8   | 4.7   | 3.9   |
|  | Perioperative/anesthesia               | 6.3   | 7.2   | 8.4   |
|  | Emergency/trauma                       | 5.4   | 6.1   | 5.8   |
|  | Critical care                          | 15.9  | 16.3  | 17.1  |
|  | Other                                  | 4.2   | 5.8   | 8.5   |
|  | Total                                  | 100.0 | 100.0 | 100.0 |
|  | <i>Number of cases</i>                 | 2,233 | 2,186 | 2,347 |
| 40. If you do not currently work in an acute hospital, have you been employed in an acute hospital in the last 24 months?  | No                                     | ...   | ...   | 81.9  |
|  | Yes                                    | ...   | ...   | 18.1  |
|  | Total                                  | ...   | ...   | 100.0 |
|  | <i>Number of cases</i>                 | ...   | ...   | 914   |
| 41. Do you supervise any unlicensed assistive personnel?   | No                                     | ...   | ...   | 39.3  |
|  | Yes                                    | ...   | ...   | 60.7  |
|  | Total                                  | ...   | ...   | 100.0 |
|  | <i>Number of cases</i>                 | ...   | ...   | 2,456 |
| 42. Do you practice telehealth/telemedicine across state lines?  | No                                     | ...   | ...   | 97.0  |
|  | Yes                                    | ...   | ...   | 3.0   |
|  | Total                                  | ...   | ...   | 100.0 |
|  | <i>Number of cases</i>                 | ...   | ...   | 2,456 |

<sup>6</sup> For the 1997 survey, 54 respondents who checked acute hospital as well as another type of organization were included under acute hospital. Several sub-categories under "other" were noted for the 1997 survey: correctional facility (N=24); outpatient or ambulatory surgery (N=18); HMO (N=16); school (N=14); and hospice (N=12).

<sup>7</sup> A number of sub-categories were noted for the 1997 survey. Obstetrics/reproductive health includes 17 respondents practicing in the area of neonatal/newborn care. Urgent care was included in emergency/trauma. The largest sub-category of other clinical areas was ambulatory care/family practice (N=48). Seventeen of these respondents also indicated that they are nurse practitioners, making them the primary health provider. Additional sub-categories for "other" include: telemetry (N=26); home health (N=25); employee/occupational health (N=20); rehabilitation (N=17); and school nurse (N=14).

Table A-2. Employment in Nursing by Survey Year

|  |  | 1990  | 1993  | 1997  |
|--|--|-------|-------|-------|
|  |  | %     | %     | %     |
| 43. Check the category below which best describes the location of the organization described in question 38.                             | Large central city (over 250,000 population) | 38.8  | 40.5  | 41.4  |
|  | Suburbs of a large city                      | 17.6  | 15.6  | 14.1  |
|  | Medium sized city (50,000-250,000)           | 28.7  | 30.8  | 31.0  |
|  | Suburbs of a medium sized city               | 2.9   | 3.1   | 2.9   |
|  | Small town (10,000-49,999)                   | 9.0   | 7.7   | 7.5   |
|  | Rural area (less than 10,000, not suburb)    | 2.6   | 2.1   | 2.6   |
|  | Other  | .4    | .1    | .5    |
|  | Total  | 100.0 | 100.0 | 100.0 |
| <i>Number of cases</i>   |  | 2,197 | 2,147 | 2,403 |
| 44. How many miles one way is it from your home to the nursing job described in questions 31 and 38?                                     | Less than 5 miles                            | 21.5  | 21.6  | 16.4  |
|  | 5-9 miles                                    | 24.0  | 22.2  | 20.5  |
|  | 10-19 miles                                  | 31.8  | 30.1  | 31.7  |
|  | 20-39 miles                                  | 18.4  | 20.2  | 24.2  |
|  | More than 40 miles                           | 4.3   | 5.9   | 7.2   |
|  | Total  | 100.0 | 100.0 | 100.0 |
|  |  | 13.1  | 14.4  | 15.9  |
|  |  | 12.0  | 13.9  | 13.7  |
| <i>Number of cases</i>   |  | 2,232 | 2,165 | 2,426 |
| 45. How long have you practiced as a registered nurse? Subtract any periods of time since licensure when you were not employed as an RN. | Less than 5 years                            | 15.4  | 12.8  | 14.4  |
|  | 5-9 years                                    | 20.3  | 18.4  | 15.7  |
|  | 10-14 years                                  | 21.4  | 20.9  | 16.0  |
|  | 15-24 years                                  | 24.9  | 29.5  | 32.6  |
|  | More than 24 years                           | 18.0  | 18.5  | 21.3  |
|  | Total  | 100.0 | 100.0 | 100.0 |
|  |  | 14.7  | 15.5  | 16.1  |
|  |  | 10.2  | 9.8   | 10.3  |
| <i>Number of cases</i>   |  | 2,241 | 2,187 | 2,461 |
| 46. Have you ever stopped working as a registered nurse for a period of more than one year?  | No   | 74.9  | 77.0  | 80.8  |
|  | Yes  | 25.1  | 23.0  | 19.2  |
|  | Total  | 100.0 | 100.0 | 100.0 |
|  | <i>Number of cases</i>                       | 2,229 | 2,181 | 2,469 |
| 47. Indicate the reasons you stopped working as a registered nurse for a period of more than one year. Check all that apply.             | Child care responsibilities                  | 71.9  | 68.7  | 62.7  |
|  | Other family responsibilities                | 19.0  | 14.0  | 10.8  |
|  | Moving to a different area                   | 30.2  | 31.5  | 29.1  |
|  | Stress on the job                            | ...   | 9.0   | 10.5  |
|  | Injury or illness                            | 9.8   | 11.6  | 9.1   |
|  | Salary                                       | ...   | 1.8   | 2.3   |
|  | Other dissatisfactions with your job         | ...   | 7.8   | 7.0   |
|  | Dissatisfaction with the nursing profession  | 16.6  | 12.4  | 8.4   |
|  | Go back to school                            | 10.0  | 12.2  | 14.8  |
|  | Travel                                       | 5.0   | 6.4   | 6.3   |
|  | To try another occupation                    | 12.9  | 14.2  | 15.2  |
|  | Laid off                                     | ...   | ...   | 1.7   |
|  | Other  | 5.5   | 2.8   | 3.2   |
|  | <i>Number of cases</i>                       | 559   | 501   | 474   |

Table A-2. Employment in Nursing by Survey Year

|   |  | 1990  | 1993  | 1997  |
|---|--|-------|-------|-------|
|   |  | %     | %     | %     |
| 48. When you returned to nursing, did you take a refresher course/program?  | No   | 73.4  | 76.5  | 70.9  |
|   | Yes  | 26.6  | 23.5  | 29.1  |
|   | Total  | 100.0 | 100.0 | 100.0 |
|   | <i>Number of cases</i>   | 556   | 498   | 464   |
| 49. Within the next five years, what are your intentions regarding the amount of time you spend in nursing? Check one only.   | Plan to increase hours of nursing work   | 6.7   | 8.4   | 8.5   |
|   | Plan to work approximately as much as now  | 46.1  | 60.1  | 57.1  |
|   | Plan to reduce hours of nursing work   | 32.7  | 21.8  | 24.7  |
|   | Plan to leave nursing entirely   | 14.6  | 9.8   | 9.7   |
|   | Total  | 100.0 | 100.0 | 100.0 |
|   | <i>Number of cases</i>   | 2,219 | 2,160 | 2,422 |
| 50. If your current position was no longer available, would you be interested in working in a nursing role in another organization if: (percent answering yes is shown) | The work hours and environment were essentially the same                         | ...   | ...   | 85.0  |
|   | <i>Number of cases</i>   | ...   | ...   | 2,387 |
|   | Retooling or retraining were necessary (e.g., moving from hospital to home care) | ...   | ...   | 66.8  |
|   | <i>Number of cases</i>   | ...   | ...   | 2,227 |
|   | Relocation was required (e.g., moving from one part of the state to another)     | ...   | ...   | 30.6  |
|   | <i>Number of cases</i>   | ...   | ...   | 2,189 |
|   |  |       |       |       |

Table A-3. Respondents Not Presently Employed in Nursing by Survey Year

|   |                                      | 1990  | 1993  | 1997        |       |
|---|--------------------------------------|-------|-------|-------------|-------|
|   |                                      | %     | %     | Non-retired | All   |
|   |                                      |       |       | %           | %     |
| 51. Which category best describes your current employment situation?  | Employed outside nursing             | 33.1  | 45.1  | 40.7        | 25.6  |
|   | Not working                          | 66.9  | 54.9  | ...         | ...   |
|   | Seeking work in nursing              | ...   | ...   | 11.7        | 7.4   |
|   | Seeking work outside nursing         | ...   | ...   | 3.4         | 2.2   |
|   | Not seeking work, but plan to return | ...   | ...   | 25.5        | 16.1  |
|   | Not employed for medical reasons     | ...   | ...   | 6.2         | 3.9   |
|   | Not employed for family reasons      | ...   | ...   | 3.1         | 2.0   |
|   | Not employed by choice               | ...   | ...   | 4.8         | 3.0   |
|   | Other                                | ...   | ...   | 4.8         | 2.8   |
|   | Retired                              | ...   | ...   | ...         | 37.1  |
|   | Total                                | 100.0 | 100.0 | 100.0       | 100.0 |
|   | <i>Number of cases</i>               | 462   | 255   | 290         | 461   |
| 52. Does your position utilize any of your nursing knowledge? (Only for currently employed)   | No                                   | 37.3  | 26.5  | 13.4        | ...   |
|   | Yes                                  | 62.7  | 73.5  | 86.6        | ...   |
|   | Total                                | 100.0 | 100.0 | 100.0       | ...   |
|   | <i>Number of cases</i>               | 150   | 113   | 119         | ...   |
| 53. How many hours per week do you usually work? (Only for currently employed)  | 8 hours or less                      | 6.0   | ...   | 4.5         | ...   |
|   | 9-16 hours                           | 6.6   | ...   | 6.3         | ...   |
|   | 17-24 hours                          | 11.3  | ...   | 12.5        | ...   |
|   | 25-32 hours                          | 8.6   | ...   | 13.4        | ...   |
|   | 33-40 hours                          | 43.0  | ...   | 35.7        | ...   |
|   | 41-48 hours                          | 8.6   | ...   | 8.9         | ...   |
|   | More than 48 hours                   | 15.9  | ...   | 18.8        | ...   |
|   | Total                                | 100.0 | ...   | 100.0       | ...   |
|   |                                      | 35.8  | ...   | 36.0        | ...   |
|   |                                      | 14.5  | ...   | 15.3        | ...   |
|   | <i>Number of cases</i>               | 151   | ...   | 112         | ...   |
| 54. What was the last year you worked as a registered nurse for at least six months? (computed to reflect number of years before survey year) | One year ago or less                 | 11.7  | 19.2  | 25.5        | 26.3  |
|   | 2-4 years ago                        | 25.9  | 30.6  | 25.2        | 27.0  |
|   | 5-9 years ago                        | 21.4  | 27.3  | 22.6        | 22.7  |
|   | 10-14 years ago                      | 16.9  | 13.9  | 14.2        | 12.9  |
|   | 15-24 years ago                      | 14.6  | 6.1   | 9.1         | 8.2   |
|   | More than 25 years ago               | 9.5   | 2.8   | 3.3         | 2.9   |
|   | Total                                | 100.0 | 100.0 | 100.0       | 100.0 |
|   |                                      | 10.0  | 6.7   | 6.7         | 6.5   |
|   |                                      | 9.3   | 7.3   | 7.1         | 7.3   |
|   | <i>Number of cases</i>               | 444   | 245   | 274         | 441   |

Table A-3. Respondents Not Presently Employed in Nursing by Survey Year

|   |   | 1990       | 1993       | 1997        |            |
|---|---|------------|------------|-------------|------------|
|   |   | %          | %          | Non-retired | All        |
|   |   |            |            | %           | %          |
| Age when last worked as a registered nurse for at least six months (computed from questions 54 and 71)  | Under 35                                | 36.3       | 28.0       | 29.8        | 19.8       |
|   | 35-44                                   | 28.6       | 33.7       | 38.2        | 25.7       |
|   | 45-54                                   | 15.9       | 21.0       | 22.1        | 18.9       |
|   | 55-59                                   | 8.8        | 7.0        | 6.3         | 12.8       |
|   | 60-64                                   | 8.3        | 5.8        | 2.2         | 13.7       |
|   | Over 64                                 | 2.1        | 4.5        | 1.5         | 9.1        |
|   | Total                                   | 100.0      | 100.0      | 100.0       | 100.0      |
|   |   | 41.4       | 42.5       | 40.6        | 47.3       |
|   |   | 11.9       | 11.6       | 9.6         | 13.0       |
| <i>Number of cases</i>  |   | <i>433</i> | <i>243</i> | <i>272</i>  | <i>439</i> |
| 55. How many years had you practiced as a registered nurse before leaving? Subtract any period of time since licensure when you were not employed as an RN. | Less than 5 years                       | 14.9       | 10.8       | 14.9        | 10.8       |
|   | 5-9 years                               | 22.5       | 26.4       | 22.1        | 16.2       |
|   | 10-14 years                             | 23.9       | 23.6       | 25.4        | 19.6       |
|   | 15-24 years                             | 22.8       | 24.0       | 25.4        | 23.6       |
|   | More than 24 years                      | 16.0       | 15.2       | 12.3        | 29.9       |
|   | Total                                   | 100.0      | 100.0      | 100.0       | 100.0      |
|   |   | 14.4       | 14.2       | 13.3        | 18.5       |
|   |   | 11.0       | 9.5        | 8.5         | 12.2       |
| <i>Number of cases</i>  |   | <i>457</i> | <i>250</i> | <i>276</i>  | <i>445</i> |
| 56. Which of the following was the greatest factor in your decision to leave nursing? Check only one.   | Child care responsibilities             | ...        | ...        | 18.9        | 13.8       |
|   | Other family responsibilities           | ...        | ...        | 3.9         | 4.0        |
|   | Moving to a different area              | ...        | ...        | 6.4         | 4.9        |
|   | Stress on the job                       | ...        | ...        | 6.8         | 6.9        |
|   | Injury or illness                       | ...        | ...        | 11.8        | 12.0       |
|   | Salary                                  | ...        | ...        | 1.8         | 1.6        |
|   | Other dissatisfaction with your job     | ...        | ...        | 5.7         | 5.3        |
|   | Dissatisfaction with                    | ...        | ...        | 10.0        | 7.6        |
|   | Go back to school                       | ...        | ...        | 2.5         | 1.8        |
|   | To try another occupation               | ...        | ...        | 16.1        | 10.0       |
|   | Retired                                 | ...        | ...        | 1.1         | 21.6       |
|   | Laid off                                | ...        | ...        | 5.4         | 4.4        |
|   | Other                                   | ...        | ...        | 9.6         | 6.2        |
|   | Total                                   | ...        | ...        | 100.0       | 100.0      |
|   | <i>Number of cases</i>                  | <i>...</i> | <i>...</i> | <i>280</i>  | <i>450</i> |
| 57. Which of the following best describes your current intentions regarding work in nursing?  | Definitely will not return to nursing   | 36.8       | 32.4       | 30.9        | 43.6       |
|   | May return to nursing                   | 54.1       | 52.6       | 42.5        | 38.9       |
|   | Plan to return to nursing in the future | 9.1        | 15.0       | 26.7        | 17.6       |
|   | Total                                   | 100.0      | 100.0      | 100.0       | 100.0      |
|   | <i>Number of cases</i>                  | <i>451</i> | <i>253</i> | <i>285</i>  | <i>450</i> |

Table A-4. Education by Survey Year for Respondents Currently Employed in Nursing

|  |                                | 1990  | 1993  | 1997  |
|--|--------------------------------|-------|-------|-------|
|  |                                | %     | %     | %     |
| 58. What was the highest level of education you had prior to your basic nursing education?             | Less than a High School degree | .6    | .5    | .8    |
|  | High School degree             | 69.0  | 62.9  | 57.4  |
|  | Associate degree               | 18.6  | 22.7  | 22.4  |
|  | Baccalaureate degree           | 11.0  | 13.2  | 17.6  |
|  | Master's degree                | .7    | .6    | 1.6   |
|  | Doctoral degree                | .1    | .0    | .3    |
|  | Total                          | 100.0 | 100.0 | 100.0 |
|  | <i>Number of cases</i>         | 2,237 | 2,197 | 2,455 |
| 59. In what kind of program did you receive your initial pre-licensure registered nursing education?   | Diploma program                | 32.3  | 28.1  | 23.6  |
|  | Associate degree program       | 39.0  | 43.0  | 44.3  |
|  | Baccalaureate degree program   | 28.6  | 28.6  | 31.7  |
|  | Master's degree program        | .1    | .3    | .5    |
|  | Doctoral degree program        | .0    | .0    | .0    |
|  | Total                          | 100.0 | 100.0 | 100.0 |
|  | <i>Number of cases</i>         | 2,229 | 2,196 | 2,440 |
| 60. What year did you graduate from that program?  | Before 1960                    | 16.7  | 10.4  | 5.5   |
|  | 1960-1969                      | 17.7  | 17.0  | 15.0  |
|  | 1970-1979                      | 31.7  | 31.0  | 28.6  |
|  | 1980-1989                      | 33.9  | 33.7  | 31.6  |
|  | 1990-1997                      | .0    | 7.9   | 19.2  |
|  | Total                          | 100.0 | 100.0 | 100.0 |
|  | <i>Number of cases</i>         | 2,230 | 2,193 | 2,424 |
| Response provided was used to compute number of years before survey year                               | Less than 5 years ago          | 11.9  | 10.5  | 11.3  |
|  | 5-9 years ago                  | 18.0  | 16.4  | 13.6  |
|  | 10-14 years ago                | 20.0  | 18.7  | 14.2  |
|  | 15-24 years ago                | 23.3  | 29.4  | 33.9  |
|  | More than 24 years ago         | 26.9  | 25.0  | 27.1  |
|  | Total                          | 100.0 | 100.0 | 100.0 |
|  | <i>Number of cases</i>         | 2,230 | 2,193 | 2,424 |
| Age when graduated from initial pre-licensure registered nursing program (computed from items 60 & 71) | Under 20                       | .9    | 1.0   | 1.7   |
|  | 20-24                          | 62.6  | 58.9  | 55.0  |
|  | 25-29                          | 16.8  | 17.5  | 18.3  |
|  | 30-34                          | 9.6   | 10.4  | 11.7  |
|  | 35-44                          | 8.3   | 9.5   | 11.2  |
|  | 45-54                          | 1.4   | 2.2   | 2.0   |
|  | 55 or older                    | .5    | .4    | .1    |
|  | Total                          | 100.0 | 100.0 | 100.0 |
|  | <i>Number of cases</i>         | 2,202 | 2,172 | 2,396 |
|  |                                | 25.5  | 26.1  | 26.4  |
| 61. In what state or country did you receive your pre-licensure nursing education?                     | California                     | 53.3  | 53.2  | 55.1  |
|  | Out-of-state                   | 33.7  | 30.4  | 24.0  |
|  | Philippines                    | 6.6   | 10.6  | 13.1  |
|  | Canada                         | 1.7   | 1.6   | 1.6   |
|  | Another foreign country        | 4.7   | 4.1   | 6.2   |
|  | Total                          | 100.0 | 100.0 | 100.0 |
|  | <i>Number of cases</i>         | 2,240 | 2,201 | 2,366 |

Table A-4. Education by Survey Year for Respondents Currently Employed in Nursing

|  |   | 1990  | 1993  | 1997  |
|--|---|-------|-------|-------|
|  |   | %     | %     | %     |
| 62. Are you currently enrolled in or planning to attend a nursing degree program within the next three years? <sup>8</sup>                         | No  | 75.7  | 72.3  | 74.7  |
|  | Yes                                       | 24.3  | 27.7  | 25.3  |
|  | Total                                     | 100.0 | 100.0 | 100.0 |
|  | <i>Number of cases</i>                    | 2,225 | 2,174 | 2,401 |
| 63. What is your degree objective?   | Associate degree program                  | .8    | 1.0   | .8    |
|  | Baccalaureate degree program              | 56.7  | 59.8  | 44.7  |
|  | Master's degree program                   | 39.5  | 37.5  | 51.1  |
|  | Doctoral degree program                   | 3.1   | 1.7   | 3.4   |
|  | Total                                     | 100.0 | 100.0 | 100.0 |
|  | <i>Number of cases</i>                    | 522   | 582   | 591   |
| 64. Which of the following certifications have you received since your initial licensure as a registered nurse. Check all that apply. <sup>9</sup> | No additional certifications/no response  | ...   | 83.6  | 79.0  |
|  | Nurse Anesthetist                         | ...   | .9    | .5    |
|  | Nurse Midwife                             | ...   | 1.2   | 1.5   |
|  | Nurse Midwife with Furnishing Number      | ...   | .4    | .1    |
|  | Nurse Practitioner                        | ...   | 2.2   | 3.2   |
|  | Nurse Practitioner with Furnishing Number | ...   | 1.3   | 2.4   |
|  | Public Health Nurse                       | ...   | 11.1  | 14.1  |
|  | Psychiatric/Mental Health Nurse           | ...   | 2.2   | 2.2   |
|  | <i>Number of cases</i>                    | ...   | 2,212 | 2,489 |
| 65. Are you planning to obtain a certification within the next three years in some area of nursing?  | No  | 70.6  | 67.6  | 71.4  |
|  | Yes                                       | 29.4  | 32.4  | 28.6  |
|  | Total                                     | 100.0 | 100.0 | 100.0 |
|  | <i>Number of cases</i>                    | 2,171 | 2,086 | 2,330 |
| If yes, certification/specialty  | Nurse Anesthetist                         | ...   | ...   | 1.4   |
|  | Nurse Midwife                             | ...   | ...   | 1.7   |
|  | Nurse Midwife w/Furnishing Number         | ...   | ...   | .2    |
|  | Nurse Practitioner                        | ...   | ...   | 17.0  |
|  | Nurse Practitioner w/Furnishing Number    | ...   | ...   | 1.4   |
|  | Public Health Nurse                       | ...   | ...   | 7.5   |
|  | Psychiatric/Mental Health Nurse           | ...   | ...   | 1.4   |
|  | Clinical Nurse Specialist                 | ...   | ...   | 3.2   |
|  | Undecided                                 | ...   | ...   | 3.0   |
|  | Other                                     | ...   | ...   | 64.4  |
|  | <i>Number of cases</i>                    | ...   | ...   | 630   |

<sup>8</sup> When making comparison between years for items 62 and 63, potential differences in editing procedures across survey years should be considered. In 1997, answers to questions 62 and 63 were edited for 61 respondents (2.1% of those answering question 62). When respondents indicated in question 62 that they would be obtaining a nursing degree, but provided a non-nursing specialty in question 63, their answer to question 62 was changed to "no" and they were removed from the distribution for question 63.

<sup>9</sup> The format of questions regarding certifications and additional degrees was modified in 1997: a list of certifications and degrees was provided and respondents were asked to indicate which they have received. In 1990 and 1993 respondents were asked to write in any additional certifications and post-RN licensure degrees and these open-ended responses were coded into categories after the fact.

Table A-4. Education by Survey Year for Respondents Currently Employed in Nursing

|  |                                       | 1990         | 1993         | 1997         |
|--|---------------------------------------|--------------|--------------|--------------|
|  |                                       | %            | %            | %            |
| 66. Please indicate which additional degrees you have received since your initial RN licensure. Check all that apply. <sup>3</sup> | No additional degrees earned          | ...          | ...          | 63.1         |
|  | Advanced practice certificate program | ...          | ...          | 7.1          |
|  | Associate degree (nursing major)      | .1           | .3           | 3.8          |
|  | Associate degree (other)              | .0           | .1           | 2.2          |
|  | Bachelor's degree (nursing major)     | 11.2         | 10.5         | 16.2         |
|  | Bachelor's degree (other)             | 5.3          | 6.4          | 6.4          |
|  | Master's degree (nursing major)       | 5.8          | 5.3          | 7.1          |
|  | Master's degree (other)               | 2.7          | 2.2          | 4.8          |
|  | Doctorate (nursing major)             | .3           | .2           | .0           |
|  | Doctorate (other)                     | .4           | .0           | .5           |
|  | <i>Number of cases</i>                | <i>2,251</i> | <i>2,212</i> | <i>2,314</i> |
| Highest nursing education (computed)   | Diploma program                       | 26.6         | 22.9         | 18.4         |
|  | Associate degree program              | 33.9         | 37.8         | 36.7         |
|  | Baccalaureate degree program          | 33.6         | 33.7         | 38.0         |
|  | Master's degree program               | 5.5          | 5.4          | 6.8          |
|  | Doctoral degree program               | .3           | .2           | .0           |
|  | Total                                 | 100.0        | 100.0        | 100.0        |
| <i>Number of cases</i>   |                                       | <i>2,229</i> | <i>2,196</i> | <i>2,440</i> |

Table A-5. Licensure and Personal Information by Survey Year for Respondents Currently Employed in Nursing

|   |  | 1990  | 1993  | 1997  |
|---|--|-------|-------|-------|
|   |  | %     | %     | %     |
| 67. In what year and in which state or country were you first licensed as a registered nurse? | Before 1960  | 16.6  | 10.2  | 5.4   |
|   | 1960-1969  | 17.5  | 16.6  | 14.4  |
|   | 1970-1979  | 30.9  | 30.5  | 27.4  |
|   | 1980-1989  | 35.0  | 34.0  | 32.0  |
|   | 1990-1997  | .0    | 8.8   | 20.7  |
|   | Total  | 100.0 | 100.0 | 100.0 |
|   | <i>Number of cases</i>   | 2,235 | 2,186 | 2,456 |
|   | Response provided was used to compute number of years before survey year |       |       |       |
|   | Less than 5 years ago  | 12.2  | 11.6  | 12.0  |
|   | 5-9 years ago  | 18.9  | 16.2  | 14.3  |
|   | 10-14 years ago  | 19.4  | 18.5  | 14.8  |
|   | 15-24 years ago  | 22.9  | 29.1  | 32.9  |
|   | More than 24 years ago   | 26.6  | 24.6  | 26.0  |
|   | Total  | 100.0 | 100.0 | 100.0 |
|   |  | 14.0  | 15.0  | 17.0  |
|   |  | 17.2  | 17.3  | 17.8  |
|   |  | 11.6  | 11.0  | 11.0  |
|   | <i>Number of cases</i>   | 2,235 | 2,186 | 2,456 |
|   | California   | 57.4  | 56.9  | 60.0  |
|   | Out-of-state   | 31.5  | 29.2  | 23.6  |
|   | Philippines  | 5.3   | 8.8   | 10.0  |
|   | Canada   | 1.7   | 1.6   | 1.6   |
|   | Another foreign country  | 4.1   | 3.5   | 4.7   |
|   | Total  | 100.0 | 100.0 | 100.0 |
|   | <i>Number of cases</i>   | 2,235 | 2,192 | 2,419 |
| 68. In what year were you first licensed as a registered nurse in California?                 | Before 1960  | 9.9   | 5.6   | 2.6   |
|   | 1960-1969  | 15.4  | 13.4  | 9.6   |
|   | 1970-1979  | 29.4  | 26.6  | 23.7  |
|   | 1980-1989  | 45.2  | 41.1  | 36.3  |
|   | 1990-1997  | .1    | 13.3  | 27.8  |
|   | Total  | 100.0 | 100.0 | 100.0 |
|   | <i>Number of cases</i>   | 2,223 | 2,183 | 2,458 |
|   | Response provided was used to compute number of years before survey year |       |       |       |
|   | Less than 5 years ago  | 18.2  | 17.5  | 17.0  |
|   | 5-9 years ago  | 22.9  | 20.7  | 17.8  |
|   | 10-14 years ago  | 19.7  | 19.6  | 18.0  |
|   | 15-24 years ago  | 20.8  | 25.7  | 29.5  |
|   | More than 24 years ago   | 18.4  | 16.6  | 17.7  |
|   | Total  | 100.0 | 100.0 | 100.0 |
|   |  | 12.0  | 12.0  | 14.0  |
|   |  | 14.3  | 14.3  | 14.9  |
|   |  | 10.4  | 10.1  | 10.1  |
|   | <i>Number of cases</i>   | 2,223 | 2,183 | 2,458 |

Table A-5. Licensure and Personal Information by Survey Year for Respondents Currently Employed in Nursing

|  |                            | 1990  | 1993  | 1997  |
|--|----------------------------|-------|-------|-------|
|  |                            | %     | %     | %     |
| Age when first licensed as a registered nurse in California (computed from items 68 & 71)      | Under 20                   | .5    | .1    | .3    |
|  | 20-24                      | 36.7  | 32.7  | 29.6  |
|  | 25-29                      | 27.2  | 27.5  | 27.9  |
|  | 30-34                      | 16.4  | 18.6  | 18.8  |
|  | 35-44                      | 15.5  | 16.1  | 19.3  |
|  | 45-54                      | 3.0   | 4.3   | 3.8   |
|  | 55 or older                | .7    | .6    | .4    |
|  | Total                      | 100.0 | 100.0 | 100.0 |
|  |                            | 26.0  | 27.0  | 28.0  |
|  |                            | 28.7  | 29.3  | 29.8  |
|  |                            | 7.5   | 7.5   | 7.3   |
| <i>Number of cases</i>   |                            | 2,207 | 2,173 | 2,434 |
| 69. Do you currently hold an active registered nurse license in a state other than California? | No                         | 86.6  | 82.8  | 85.3  |
|  | Yes                        | 13.4  | 17.2  | 14.7  |
|  | Total                      | 100.0 | 100.0 | 100.0 |
| <i>Number of cases</i>   |                            | 2,251 | 2,194 | 2,468 |
| If yes, how many?  | One other state            | 75.4  | 75.5  | 78.9  |
|  | Two other states           | 17.9  | 17.9  | 14.6  |
|  | Three or more other states | 6.6   | 6.6   | 6.4   |
|  | Total                      | 100.0 | 100.0 | 100.0 |
|  | <i>Number of cases</i>     | 301   | 273   | 280   |
| 70. Gender   | Male                       | 5.4   | 5.8   | 7.4   |
|  | Female                     | 94.6  | 94.2  | 92.6  |
|  | Total                      | 100.0 | 100.0 | 100.0 |
| <i>Number of cases</i>   |                            | 2,214 | 2,200 | 2,472 |
| 71. Age (computed from year of birth)  | Under 30                   | 8.3   | 6.3   | 6.1   |
|  | 30-34                      | 16.0  | 12.8  | 9.3   |
|  | 35-39                      | 19.9  | 18.2  | 14.2  |
|  | 40-44                      | 17.2  | 20.8  | 20.6  |
|  | 45-49                      | 12.4  | 13.9  | 20.5  |
|  | 50-54                      | 9.3   | 12.5  | 14.0  |
|  | 55-59                      | 9.3   | 8.0   | 8.6   |
|  | 60-64                      | 4.5   | 4.7   | 4.9   |
|  | 65 or older                | 3.1   | 2.8   | 1.8   |
|  | Total                      | 100.0 | 100.0 | 100.0 |
|  |                            | 41.0  | 42.0  | 44.0  |
|  |                            | 42.9  | 43.6  | 44.6  |
|  |                            | 10.8  | 10.1  | 9.5   |
| <i>Number of cases</i>   |                            | 2,226 | 2,192 | 2,451 |

Table A-5. Licensure and Personal Information by Survey Year for Respondents Currently Employed in Nursing

|   |   | 1990  | 1993  | 1997  |
|---|---|-------|-------|-------|
|   |   | %     | %     | %     |
| 72. Check your racial/ethnic background.<br>If mixed, indicate the category with<br>which you most strongly identify. | Hispanic                                    | 3.7   | 4.5   | 4.9   |
|   | White, not Hispanic                         | 77.2  | 72.6  | 64.5  |
|   | Black/African American                      | 4.7   | 3.5   | 4.8   |
|   | Asian Indian                                | ...   | .4    | 1.2   |
|   | Other Asian                                 | ...   | 4.4   | 5.5   |
|   | Pacific Islander                            | ...   | .3    | .2    |
|   | Filipino                                    | ...   | 13.4  | 15.9  |
|   | Asian, Southeast Asian, or Pacific Islander | 12.7  | ...   | ...   |
|   | Native American Indian/American Eskimo      | .6    | .5    | .5    |
|   | Other                                       | 1.2   | .5    | 2.4   |
|   | Total                                       | 100.0 | 100.0 | 100.0 |
| <i>Number of cases</i>  |   | 2,251 | 2,179 | 2,458 |
| 73. Current marital status  | Never married                               | 16.2  | 12.2  | 13.5  |
|   | Separated or divorced                       | 16.3  | 18.4  | 17.6  |
|   | Married                                     | 64.9  | 66.4  | 66.5  |
|   | Widowed                                     | 2.7   | 3.0   | 2.4   |
|   | Total                                       | 100.0 | 100.0 | 100.0 |
|   | <i>Number of cases</i>                      | 2,229 | 2,197 | 2,463 |
| 74. Number of children living at home   | None  | 40.0  | 38.1  | 38.2  |
|   | One   | 25.2  | 24.7  | 22.9  |
|   | Two   | 23.3  | 25.1  | 26.3  |
|   | Three                                       | 9.0   | 9.5   | 9.7   |
|   | Four or more                                | 2.5   | 2.6   | 2.9   |
|   | Total                                       | 100.0 | 100.0 | 100.0 |
|   |   | 1.1   | 1.2   | 1.2   |
| Age of children living at home  |   | 1.1   | 1.1   | 1.2   |
|   | <i>Number of cases</i>                      | 2,014 | 2,050 | 2,297 |
|   |   | 11.3  | 11.8  | 12.4  |
|   |   | 7.4   | 7.4   | 7.2   |
| <i>Number of cases</i>  |   | 1,203 | 1,267 | 1,413 |
| 75. Are there other people (spouse,<br>parents, grandchildren, friends)<br>dependent on you for care?                 | None  | 84.7  | 81.2  | 76.1  |
|   | One   | 10.5  | 12.2  | 15.4  |
|   | Two   | 3.6   | 4.8   | 6.2   |
|   | Three                                       | 1.0   | 1.0   | 1.4   |
|   | Four or more                                | .3    | .8    | 1.0   |
|   | Total                                       | 100.0 | 100.0 | 100.0 |
| Age of dependents   |   | .2    | .3    | .4    |
|   |   | .6    | .7    | .8    |
|   | <i>Number of cases</i>                      | 2,209 | 2,163 | 2,312 |
|   |   | 49.7  | 47.8  | 50.3  |
|   |   | 24.4  | 23.6  | 23.6  |
|   | <i>Number of cases</i>                      | 321   | 385   | 515   |

Table A-5. Licensure and Personal Information by Survey Year for Respondents Currently Employed in Nursing

|  |                                | 1990   | 1993   | 1997   |
|--|--------------------------------|--------|--------|--------|
|  |                                | %      | %      | %      |
| 76. Geographic region (based on zip code)  | San Diego, Imperial            | 9.7    | 10.0   | 9.4    |
|  | San Bernardino, Orange, Desert | 17.0   | 18.1   | 16.6   |
|  | Los Angeles County             | 22.4   | 25.4   | 24.0   |
|  | Central Valley-South           | 4.2    | 3.5    | 4.5    |
|  | Central Coast                  | 5.6    | 5.7    | 5.3    |
|  | San Jose Peninsula             | 10.1   | 9.0    | 10.0   |
|  | Central Valley-North           | 10.1   | 8.7    | 10.0   |
|  | San Francisco, East Bay, Marin | 14.3   | 13.4   | 13.7   |
|  | Napa-Sonoma                    | 3.4    | 2.8    | 3.1    |
|  | North Coast                    | .6     | .4     | .5     |
|  | North Central                  | 2.5    | 2.9    | 2.7    |
|  | Total                          | 100.0  | 100.0  | 100.0  |
| <i>Number of cases</i>   |                                | 2,089  | 2,179  | 2,489  |
| 77. Check the category that includes your income from nursing in year before survey.                 | \$10,000 or less               | 4.5    | 4.1    | 4.5    |
|  | \$10,001 to \$15,000           | 5.3    | 3.2    | 2.6    |
|  | \$15,001 to \$20,000           | 8.2    | 2.9    | 2.4    |
|  | \$20,001 to \$30,000           | 27.6   | 11.1   | 9.0    |
|  | \$30,001 to \$40,000           | 33.2   | 24.3   | 20.0   |
|  | \$40,001 to \$55,000           | 18.3   | 35.9   | 34.5   |
|  | \$55,001 to \$75,000           | 2.3    | 15.3   | 22.6   |
|  | More than \$75,000             | .5     | 3.3    | 4.5    |
|  | Total                          | 100.0  | 100.0  | 100.0  |
|  |                                | 31,504 | 42,163 | 45,073 |
|  |                                | 13,097 | 17,238 | 18,366 |
| <i>Number of cases</i>   |                                | 2,186  | 2,141  | 2,420  |
| 78. Check the category that includes your total household income in year before survey.              | \$10,000 or less               | .2     | .6     | .9     |
|  | \$10,001 to \$15,000           | 1.1    | .3     | .7     |
|  | \$15,001 to \$20,000           | 2.3    | 1.1    | 1.0    |
|  | \$20,001 to \$30,000           | 9.7    | 3.1    | 2.9    |
|  | \$30,001 to \$40,000           | 19.1   | 10.3   | 7.5    |
|  | \$40,001 to \$55,000           | 23.0   | 19.7   | 18.1   |
|  | \$55,001 to \$75,000           | 24.3   | 27.5   | 25.1   |
|  | More than \$75,000             | 20.4   | 37.3   | 43.7   |
|  | Total                          | 100.0  | 100.0  | 100.0  |
|  |                                | 53,686 | 63,628 | 65,781 |
|  |                                | 20,965 | 20,135 | 20,437 |
| <i>Number of cases</i>   |                                | 2,182  | 2,128  | 2,415  |
| 79. Circle the approximate percentage of your total household income that comes from nursing job(s). | Less than 25 percent           | 13.2   | 8.7    | 9.3    |
|  | 25 to 50 percent               | 32.3   | 28.4   | 26.2   |
|  | 51 to 75 percent               | 18.4   | 25.1   | 23.7   |
|  | 76 to 99 percent               | 8.8    | 10.9   | 13.2   |
|  | 100 percent                    | 27.3   | 26.9   | 27.6   |
|  | Total                          | 100.0  | 100.0  | 100.0  |
|  |                                | 34.4   | 38.5   | 38.9   |
|  |                                | 26.5   | 27.8   | 28.8   |
| <i>Number of cases</i>   |                                | 2,209  | 2,150  | 2,448  |

Table A-6. Percent Ineligible and Response Rate by Age and Date of California Licensure

|   |                                | Ineligible* |       | Response Rate |       |
|---|--------------------------------|-------------|-------|---------------|-------|
|   |                                | %           | N     | %             | N     |
| Overall for total sample                    |                                | 2.6         | 4,000 | 75.8          | 3,897 |
| Age   | Under 30                       | 6.9         | 233   | 71.4          | 217   |
|   | 30-34                          | 4.5         | 352   | 72.3          | 336   |
|   | 35-39                          | 2.2         | 551   | 71.6          | 539   |
|   | 40-44                          | 1.8         | 812   | 71.6          | 797   |
|   | 45-49                          | 2.0         | 740   | 79.2          | 725   |
|   | 50-54                          | 2.1         | 516   | 77.6          | 505   |
|   | 55-59                          | 1.2         | 343   | 79.9          | 339   |
|   | 60-64                          | .8          | 256   | 78.7          | 254   |
|   | 65 or older                    | 6.6         | 196   | 82.5          | 183   |
| Date initially<br>licensed in<br>California | Less than 5 years ago          | 5.4         | 654   | 74.0          | 619   |
|   | 5-9 years ago                  | 3.1         | 675   | 71.7          | 654   |
|   | 10-14                          | 1.7         | 710   | 71.9          | 698   |
|   | 15-19                          | 2.1         | 669   | 74.4          | 655   |
|   | 20-24                          | 1.2         | 481   | 80.4          | 475   |
|   | 25-29                          | 1.3         | 314   | 77.4          | 310   |
|   | 30-34                          | 2.7         | 226   | 81.4          | 220   |
|   | 35-39                          | .0          | 136   | 84.6          | 136   |
|   | 40 or more                     | 4.5         | 134   | 86.7          | 128   |
| Geographic<br>region                        | San Diego, Imperial            | 3.5         | 372   | 76.0          | 359   |
|   | San Bernardino, Orange, Desert | 3.4         | 734   | 73.1          | 709   |
|   | Los Angeles county             | 2.4         | 940   | 74.5          | 917   |
|   | Central Valley-South           | 1.7         | 180   | 76.8          | 177   |
|   | Central Coast                  | 3.3         | 210   | 77.3          | 203   |
|   | San Jose Peninsula             | 3.1         | 393   | 75.3          | 381   |
|   | Central Valley-North           | 1.3         | 389   | 78.9          | 384   |
|   | San Francisco, East Bay, Marin | 2.1         | 534   | 74.4          | 523   |
|   | Napa, Sonoma, Lake, Mendocino  | 4.1         | 121   | 87.1          | 116   |
|   | North Coast                    | .0          | 21    | 81.0          | 21    |
|   | North Central                  | .0          | 106   | 75.5          | 106   |

\* Undeliverable, moved out-of-state, disabled or deceased.